# SOVEREIGN DEFENCE & AEROSPACE

# **MADE IN NSW**

LAND FORCES 2022

COMPENDIUM







# CONTENTS

FOREWORD	4
WELCOME	6
NSW DEFENCE AND AEROSPACE CAPABILITIES	7
THE AUSTRALIAN DEFENCE AND AEROSPACE INDUSTRY IN NSW	9
OUR DEFENCE AND AEROSPACE ECOSYSTEM	10
REGIONS AND PRECINCTS	12
NORTH COAST	13
HUNTER	14
TECH CENTRAL	16
ILLAWARRA-SHOALHAVEN	17
SOUTH JERRABOMBERRA	19
WESTERN SYDNEY	20
RIVERINA-MURRAY	22
ADROITA	24
ADVANCED NAVIGATION	26
ADVANCED POWER DRIVES	27
AIR AFFAIRS AUSTRALIA PTY LTD	28
AUSTEST LABORATORIES	29
BAKER & PROVAN	31
BLUECATS	32

#### **BPS DEFENCE** 34 **DEFENCE INNOVATION NETWORK** 36 **DRONESHIELD** 37 FIFTY ZOO 38 **GLOBAL DEFENCE SOLUTIONS** 40 **GME** 42 **HUNTERNET COOPERATIVE** 43 ILLAWARRA SHOALHAVEN DEFENCE INDUSTRY 44 JENKINS ENGINEERING DEFENCE SYSTEMS 46 **McCONAGHY** 48 MERCURY INFORMATION SECURITY SERVICES 49 **MILSPEC** 50 52 **NUPRESS REACH ROBOTICS** 54 **ROJONE** 55 **ROXTEC AUSTRALIA** 57 STELLA ENGINEERING 59 SYSTECON 60 **VICOM AUSTRALIA** 61

# **FOREWORD**

The years ahead present significant and exciting opportunities for the Defence and Aerospace sector and its many complementary industries, which make NSW the natural home of our national defence and aerospace industrial base.

NSW hosts more than a quarter of Australian defence personnel and all Services retain significant operations in the state. We have some 80 defence facilities as well as 21 bases and training areas.

NSW has a rich industrial legacy in advanced manufacturing –due in part to Australia's defence and aerospace industries, which have capabilities in maritime, space, munitions, small arms, and military systems manufacturing. Our industrial base includes highly innovative, competitive, and world-leading manufacturers and a highly skilled and sustainable workforce, equipped with both technical and tertiary qualifications to power industrial growth.

NSW delivers advanced capabilities in a wide range of relevant fields, from materials research and communication technology through to complex systems integration. This inherent advantage reinforces the defence and aerospace industry as a priority sector for the state.

Supported by a strong and diverse economy, we view the future of Australia's growing defence and aerospace industry from a whole-of-state perspective. Our six cities model places the focus on our key regions including Greater Sydney, the Lower Hunter, Greater Newcastle, the Central Coast, Western Sydney and the Illawarra-Shoalhaven. This model is enhanced by our rapidly expanding precincts at Tech Central, Williamtown, Parkes and South Jerrabomberra, all of which offer infrastructure, research and innovation ecosystems that are specifically tailored for industry.



The state's academic prowess, backed by the Defence Innovation Network and Space Research Network, serve to set the foundation for our future national sovereign industry and security capabilities. NSW boasts well-established R&D infrastructure in partnership with our universities and research organisations, supported by the newly established Future Economy Fund, ensuring NSW continues to lead the nation in the future of quantum technology, robotics, autonomous systems and artificial intelligence.

We are extremely proud of our leading technological edge in supporting and growing the defence and aerospace industry in NSW and the companies featured in this Prospectus serve as excellent examples to showcase the complexity, depth, and breadth of capabilities across our defence and aerospace industrial supply chain.

NSW is a strong and proud supporter of the Australian Defence Force and is confident it will adopt a leading role for the growth of the National Defence and Aerospace ecosystem in the decades ahead. Find out more about NSW's defence and aerospace-related capabilities and how we can collaborate by visiting our website: investment.nsw.gov.au/defence-and-aerospace.

#### The Honourable Alister Henskens SC MP

Minister for Enterprise, Investment and Trade Minister for Science, Innovation and Technology Minister for Sport Minister for Skills and Training

# **WELCOME MESSAGE**

The NSW Government is committed to building a business environment conducive to economic growth and social prosperity. Key to achieving that is our support for the state's rapidly growing defence and aerospace sector.

Defence and aerospace is a dynamic emerging industry within NSW that generates significant spill-over benefits for the broader economy and the people of NSW. As Australia's leading investment promotion agency, Investment NSW is working with the private sector, research institutions and other levels of government to spur its future growth.

The NSW Industry Development Framework underpins this work with a structured approach that enables us to build on NSW's advantages, creating more and better jobs, globally competitive industries and a resilient economy.

To help achieve this, we have undertaken broad industry consultation during 2022 to develop the first White Paper on Industry Policy in NSW so we can put in place the best coordinated support for business, while reflecting and responding to domestic and global trends.

NSW is already home to some of the highest calibre defence and aerospace businesses in Australia. They are technologically advanced, globally competitive and supported by a highly educated workforce at every level.

Land Forces 2022 is an important platform for these world-class businesses to showcase the outstanding sovereign capabilities that exist in our backyard.

Connect with the NSW Government's Defence & Aerospace team and explore how working together, we can make opportunities happen.

# Katie Knight

Interim CEO
Investment NSW



# NSW DEFENCE AND AEROSPACE CAPABILITIES

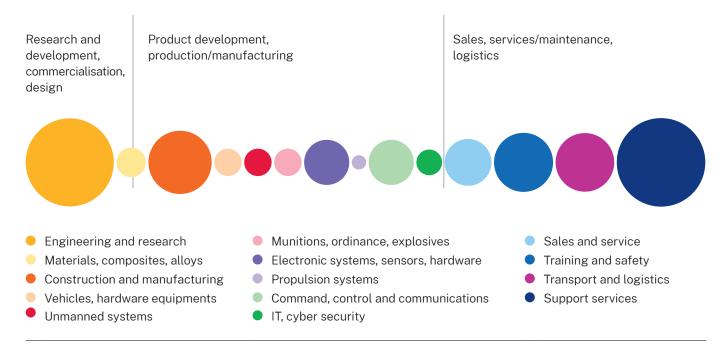
#### **Defence**

NSW's strong industrial base underpins our defence capability. The defence sector is supported by a deep and complex industrial base with capabilities in materials research, industrial design, information and communication technology, and complex systems integration. NSW offers these capabilities, positioning it well to meet current and future workforce skills needs.

The industrial base underpinning the NSW defence sector in NSW includes highly innovative, competitive and world-leading manufacturers that are using state-of-the-art technology and highly skilled staff. These manufacturers are vital to the diversity and strength of the Australian economy. Overall, manufacturers in NSW produce almost 30% of the country's total output in the sector, generating around A\$30.18 billion annually and accounting for one-third of manufacturing jobs.

NSW enjoys a very robust capability across the entire defence industry value chain.

# Relative strengths of industry capability



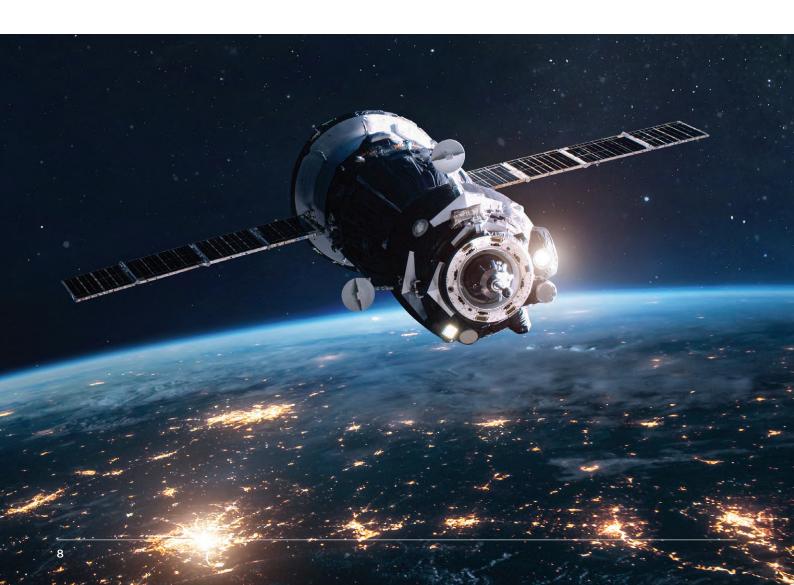
#### **Space**

The Australian Government launched the Australian Space Agency in 2018 with the goal of tripling the national space economy to AUD\$12 billion by 2030 and developing 12,000 additional highly skilled jobs. With the largest proportion of Australia's space industry based in NSW, the state is well placed, economically, politically and geographically, to maximise the benefits to businesses from this new space era.

NSW boasts the Nation's broadest and strongest space capability and is the only state that can deliver capability across every element of the space industry and the entire value chain:

- space systems
- launch activities and support services
- ground systems
- space-enabled services and applications
- space activity support services
- space-related research and development
- space education and training
- space-related associations and public information activities.

In particular the state's strengths relate to high-tech instrumentation, ground station infrastructure, smart payloads development, space and intra-space communications, and commercialisation of space data.



# THE AUSTRALIAN DEFENCE AND AEROSPACE INDUSTRY IN NSW



Defence expenditure in NSW exceeds \$12.5b annually



NSW is home to over 80 defence facilities, including 21 defence bases and training areas



NSW accounts for 29% of Australia's \$2 billion aircraft manufacturing and repair services exports



Space industries and agencies in NSW generate up to 75% of Australia's space-related revenue generation



NSW is Australia's leader for space innovation and entrepreneurship, with 38% of all Australian space startups based in the state



41% of all Australian space businesses are based in NSW



NSW is a leader in cybersecurity, producing 58% of the country's ICT services exports



NSW has the majority of the nation's leading tertiary and research institutions



NSW employs the highest number of defence industry skilled workers, with over 65,000 direct or indirect jobs



50% of Australia's space export revenue is generated in NSW



NSW is a leader in space education and training, with 31% of Australian university departments active in space

# OUR DEFENCE AND AEROSPACE ECOSYSTEM

## Established and new capabilities

New South Wales is home to a highly innovative and technically sophisticated defence and aerospace sector. It is connected to advanced manufacturing, cyber security and space coupled with established transport, logistics and infrastructure systems.

#### **Guided Weapons and Explosive Ordnance (GWEO)**

NSW has the existing manufacturing and sustainment base to support the acceleration of the GWEO. NSW is already home to the majority of Australia's capabilities in this sector and is making investments to support enhancing this sovereign capability.

The NSW Government fully supports the existing Defence presence in New South Wales, including the strategic importance of Orchard Hills, Garden Island and other establishments.

Additionally, it remains committed to expansion of that defence presence through placement of new assets, facilities and units. It has the industrial strength and the logistical connections to support Australian defence force expansion.

# Land capabilities

NSW has a long history in the land defence domain.

- The Lithgow Small Arms factory has been manufacturing military weapons
   including the latest ADF small arms for well over 100 years.
- Mulwala factory in Regional NSW produces high quality propellants and ordnance.
- Australian Target Systems in Albury are a leading manufacturer of moving targets systems.
- Milspec makes power systems and vehicle parts various military and fighting vehicles.
- Bisalloy works in close collaboration with BlueScope Steel and the Defence Science and Technology (DST) Group to manufacture a range of defence and ballistic grades of steel.
- In terms of Army basing, major establishments in the state include Blamey Barracks, Wagga Wagga, home of the Army Recruit Training Centre (ARTC).
   Soldiers have trained at the site, which has had various unit names, since 1942.
- Major army establishments are also located at Holsworthy in the Liverpool area of Sydney and at Singleton in the Hunter Valley. Victoria Barracks in the heart of Sydney is the home of Army's Headquarters Forces Command.

#### Maritime capabilities

- NSW is the major supporter of the Defence maritime sector. For over 100 years, NSW has made extensive contributions to the Defence maritime sector capability and this should always be celebrated. Notably, Sydney and the South Coast have been home to many of the Royal Australian Navy's assets, and continue to proudly support these through industry, workforce and innovation. The economic footprint of the Defence sector in NSW includes both direct and indirect components.
- Major defence industry players including Thales, Sonartech Atlas, Rolls-Royce Australia, Forgacs Marine and Defence are co-located here in NSW, providing critical support to the Navy.
- A significant maritime industry exists in NSW, including Garden Island
  Defence Precinct in Sydney. Garden Island is the homeport for Navy's
  major fleet units on the East Coast and includes the Captain Cook Graving
  Dock, a major maintenance asset. NSW businesses participate fully in the
  maritime sustainment sector, providing services such as ship repair and
  refurbishment. The Navy's presence in and around Sydney Harbour is a
  highly complex network of interlinked facilities.
- NSW businesses supply major components such as cranes, navigation systems, sonar, electronic warfare equipment and steering components as well sustainment support to both Navy and civilian clients.

#### Space capabilities

NSW has the broadest and strongest space capability in Australia and is the only state that boasts capability across every sector of the space industry and value chain:

- 63% of space legal services
- 60% of satellite broadcast companies
- 50% of space financial services
- 49% of Australia's satellite communications sector
- 46% of satellite equipment suppliers
- 40% of ground station company owners/operators
- 35% of satellite communication companies
- 30% of satellite equipment manufacturers
- around 30% of Australian staff involved in space activities
- 26% of space technical support and business consultancy services
- the headquarters of six of the eight satellite operators in Australia.

# **REGIONS AND PRECINCTS**

NSW encourages growth in the defence and aerospace industry in its regions and precincts.



# **NORTH COAST**

# The North Coast has developed a strong manufacturing base which includes both defence and marine applications.

Businesses are capitalising on the region's education and ICT investments to grow and innovate within a supportive and highly liveable environment. The region's significant expanse of National and State parks and popular pristine beaches also underpin a thriving tourism industry. As one of the fastest growing populations in NSW, the North Coast has a reputation for an enhanced quality of life, equidistant to Brisbane and Sydney.

# Key capabilities

- Small vessel design and manufacturing
- Maritime sustainment and disposals
- Advanced design, manufacturing and support of specialist defence products.

The North Coast Region, including the towns of Yamba and Port Macquarie have numerous defence industry capabilities which support Defence, other government and commercial organisations in Australia and internationally.

Headquartered in Port Macquarie, Birdon is regularly recognised as a Top 20 Defence SME and is one of only two Australian companies to contract directly to the US Army. Birdon group of companies now employs around 400 personnel across the world, with operations throughout Australia, in the United States of America, Europe and Asia. The group's capabilities include design and development, engineering and fabrication, repair and refit, marine propulsion, asset management, shipping, and disposal.

Also based in Port Macquarie, Bale Defence, has a strong commitment to research and development and their design team are proven in delivering innovative, custom designed solutions to a vast range of engineering and manufacturing based problems. Bale's highly skilled fabricators manufacture a range of specialist products including Special Forces equipment, weapon storage systems, weapon mounts, weapon repair, specialised containers, copper nickel pipe and fittings, ship furnishings, marine watertight doors and hatches, high and low pressure valves, EO lockers, propeller supply and repair, system definitions and layout, RO, naval architecture, WH&S equipment, all backed up with strong logistical support.

Yamba Welding and Engineering (YWE) (a subsidiary of Australian veteranowned watercraft manufacturer, the Whiskey Group) are recognised for their naval design and manufacturing. YWE is a specialist high-performance aluminium boat builder with a thriving operation employing 36 locals, numerous apprentices and a trusted local supply chain. YWE has forged a reputation as a trusted partner to Australian and State law enforcement and maritime agencies. Located on the Clarence River, near Yamba, Harwood Marine focuses its services on design, engineering, shipbuilding and repair (aluminium and steel), abrasive blasting. Their facilities include a 3,000 tonne slipway and five construction sheds (including an abrasive blasting and spray-painting facility).

#### **Liesa Davis**

liesa.davies@ regional.nsw.gov.au +61 417 651 985

investregional.nsw.gov.au/regions/north-coast

#### **HUNTER**

The Hunter is the largest economy in Regional NSW contributing over A\$34.7 billion to the NSW economy.

The Hunter has a diverse economy with strengths across advanced manufacturing, aerospace, defence, tourism and mining.

With its increasing focus on the knowledge economy, a dynamic start-up sector has developed. NSW government investment in infrastructure and the rollout of Australia's most sophisticated 'Internet of Things' platform across the Newcastle CBD facilitates future expansion.

The Hunter combines an innovative economic and business environment with a high standard of living and proximity to Sydney. The University of Newcastle (a global top 350 university) provides access to a diverse talent pool and industrial research connections.

#### **Key capabilities**

Williamtown, located 20 minutes from Newcastle, is home to Newcastle Airport and RAAF Base Williamtown. RAAF Base Williamtown is Australia's primary defence Fighter Base and home to the country's new fleet of F-35 Joint Strike Fighters.

#### Local capabilities include:

- Home to fleet of F-35
- Existing airport and RAAF airbase which provides direct access to runways,
   maintenance and support services unique to area and difficult to replicate
- Airport Access
- Strong Defence network within the Williamtown area from airbase, training facilities, sustainment services
- Primes already exist in the area with major projects currently being completed. Large and long running projects within Defence with a desire to increase local content. Supporting jobs and activity across supply chain in various sectors
- · Strong and established security in the area
- Opportunity for Defence related companies to collaborate with related businesses
- High level of technical skills around Defence exists in area
- The Hunter has an existing skilled workforce to support defence, aerospace and advanced manufacturing
- Anchor tenants and Defence Primes such as RAAF, BAE Systems, Boeing Defence Australia, Lockheed Martin, Northrop Grumman, Raytheon and Thales.

#### **Derek Wong**

derek.wong@ regional.nsw.gov.au +61 436 929 492 investregional.nsw.gov.au/ regions/hunter

PART OF THE
REGIONAL DEFENCE
NETWORKS PROGRAM
SERVICE PROVIDER
HunterNet Cooperative

#### Tim Owen

tim.owen@ hunternet.com.au +61 477 201 000 hunternet.com.au

#### **Current and future developments**

Williamtown is fast becoming a world-leading innovation hub for defence and aerospace and is home to some of the world's largest defence primes including BAE Systems, Boeing, Lockheed Martin and Raytheon.

The Williamtown Special Activation Precinct has been identified by the NSW Government as a precinct that will create the defence and aerospace hub, boost the local economy and generate thousands of new jobs for the region. It will bring together specialised large scale international prime contractors, small and medium enterprises, and research and development institutions to create jobs and attract talent into the region.

Uniquely co-located with RAAF Base Williamtown and Newcastle Airport is Australia's newest defence and aerospace precinct, Astra Aerolab. A one-of-a-kind precinct, enhancing Australia's ability to deliver world class sustainment and manufacturing capability to the Defence sector.

The Astra Aerolab ecosystem will boost businesses ability to access this globally significant defence network. A pre-eminent space for innovation and excellence, Astra Aerolab is a place where industries and people can connect, collaborate and experience a strong sense of community. A place where the world's best talent meets a unique combination of advanced technology, airport connectivity and outstanding lifestyle.

#### Other opportunities include:

- Development of advanced manufacturing in the area
- Training facilities to support the defence and aerospace network
- Job opportunities from the expansion of Primes and SMEs in Williamtown
- Code E runway upgrade.

# **TECH CENTRAL**

In the heart of Sydney, the brightest minds come together to solve our society's great challenges and create the technologies that will power the future.

Tech Central brings together six neighbourhoods in Sydney which are already home to some of Australia's most exciting startups and innovative institutions. It is a place where people can come together to innovate, disrupt, collaborate, exchange ideas, and explore new markets

#### Key capabilities

- Three world-class universities
- A world-leading research hospital
- Over 100 research institutes and centres of excellence.
- Tech giants. Frontier startups. Ambitious students. Pioneering academics. Creatives. Executives. Developers. Scientists
- Home to the brightest minds and most innovative institutions
- Anchored by the best-connected transport interchange in the country, Tech Central's unique geographic footprint allows the resources and ingenuity of universities, hospitals, startups, scaleups, research institutes and globally-successful firms to collide.

#### **Current and future developments**

Tech Central is already home to free thinkers, creative spirits and problem solvers who challenge convention. It embodies innovation – social, cultural, intellectual and economic. Diverse and inclusive communities are core to Tech Central's strength, identity and ethos.

With the NSW Government providing affordable spaces to researchers, innovators, startups and entrepreneurs to incubate, test and scale their ideas –and with the sector anchored by Atlassian's future Australian HQ –Tech Central will become the recognised home of industries breaking new ground.

By 2023, the NSW Government will have catalysed this innovation ecosystem –Tech Central –connecting organisations to create a globally renowned community that pulses with inspiration and draws top tech talent from across the world to do their best work.

#### Ria Bairstow

ria.bairstow@ gsc.nsw.gov.au tc.sydney

# **ILLAWARRA-SHOALHAVEN**

The Illawarra-Shoalhaven is a region transformed. Traditionally known for its world-class steel making and coal mining industries, the region's economy is today driven by the advanced manufacturing, ICT and professional services and defence sectors.

The region's significant defence presence is anchored by the Australian naval aviation at HMAS Albatross and the Albatross Aviation Technology Park (AATP). Global prime contractors have established themselves at the AATP to service both HMAS Albatross and the national defence sector.

The region is well connected to domestic and international markets through a high quality broadband network, road and rail connections into Sydney and other markets on Australia's east coast, and NSW's third largest port at Port Kembla and the Illawarra Regional Airport.

# Key capabilities

#### Illawarra

- Armoured steel plates
- · High-end welding and engineering
- Advanced fabrication
- Blasting and metal preparation
- Electrical isolators and enclosures
- Specialist protective coatings
- Ruggedised medical computing devices and communication systems
- Gearbox manufacturing
- Engineering design
- On-site services
- · Project management services.

#### **Tony Dyer**

tony.dyer@ regional.nsw.gov.au +61 419 093 081

investregional.nsw. gov.au/regions/ illawarra-shoalhaven

PART OF THE REGIONAL DEFENCE NETWORKS PROGRAM

SERVICE PROVIDER

Shoalhaven City Council on behalf of Shoalhaven Defence & Industry Group

business@ shoalhaven.nsw.gov.au +61 2 4429 3388 shoalhavendefence.com.au

#### **Shoalhaven**

- Accredited Aircraft Maintenance Engineer Training
- Advanced Manufacturing
- Anti-Submarine Warfare Training and Testing
- Armour and exotic material processing
- Avionics test and repair
- AIR9000 Phase 8 Sustainment
- Deployable infrastructure Build and Maintain
- Electronic Warfare Testing and Validation
- Humanitarian Assistance and Disaster Relief Training
- Jet Air Support
- Joint Adversarial Training and Testing Services (JATTS)
- Joint Airborne Rescue Services (JARS)
- Medical Support and Retrieval
- Project SEA129-5 Maritime Tactical Unmanned Aerial System (MTUAS)
- Provision of Aerial Target Services from Aircraft
- Proximity to Jervis Bay and Naval Eastern Exercise Area
- · Search and Rescue
- University of Wollongong Industry 4.0 Hub research, training and industry partnerships.

#### Current and future developments

The Illawarra/Shoalhaven region provides a world class innovation ecosystem for international businesses to create a presence to drive Defence industry collaboration and partnerships.

- Albatross Aviation Technology Park (AATP) is designed specifically to support defence and aviation industries. The 35-hectare estate adjoins the airfield of HMAS Albatross and is connected by taxiways to the base
- Wollongong is an hour south from Sydney and its international Airport.
- Close proximity to defence facilities, including Garden Island, HMAS Albatross and HMAS Creswell
- Port Kembla a deep water port, provides businesses based in Wollongong with access to global markets and is situated five kilometres south of the Wollongong CBD
- Leading Defence research and development organisations established by or in partnership with the University of Wollongong (UOW). DMTC, Smart Infrastructure Facility the Steel Research Hub and the UOW Institute of Cybersecurity and Cryptology
- Illawarra Innovation Industry Network (i3 net) is an organisation that has an array of manufacturers, engineering service providers and industrial suppliers
- BlueScope master planning for 200 hectares (500 acres) of excess landholdings adjacent to the Port Kembla Steelworks.

#### **Donna Payne**

donna.payne@ regional.nsw.gov.au +61 417 497 869

investregional.nsw. gov.au/regions/ illawarra-shoalhaven

# SOUTH JERRABOMBERRA

Poplars Innovation Precinct is located at South Jerrabomberra within the NSW Government's Regional Job Precinct. It is the focus of economic development for the Queanbeyan Palerang Regional Council.

The site is well positioned within the Capital Region being located immediately adjacent to the Australian Capital Territory.

# **Key capabilities**

- Access to a large, educated workforce (Canberra population of 452,000)
- 15 minutes from an international airport for export
- Direct access to key logistics and freight options (road, rail)
- Competitive land costs with buy or lease options. All lots within the Innovation Precinct are tailored to the requirements of investors with a minimum lot size of 4.000m<sup>2</sup>
- Ability to tailor to incoming tenants greenfield site
- Innovation Precinct (business park) complemented by 13ha Retail + Service Precinct
- Onsite Innovation Hub, partnering with University of NSW and University of Canberra
- Satellite manufacturing facility funded by Government and Industry Partners
- Large data centre in Stage One
- Triple redundancy telecommunication networks
- Proximity to multiple research institutions Universities, TAFEs and Colleges
- Close to national decision makers (15 mins from CBD Canberra)
- The advantage of being one of four Regional Jobs Precincts that attracts additional government support including accelerated planning assistance and infrastructure support
- \$30 million government investment for key infrastructure to supercharge site
- Access to the Intra-governmental Communications Network provides an unmetered and cost-effective telecommunication services to 67 Australian Government agencies, across 3,000 fibre links
- \$35 million electricity upgrade currently underway for the Jerrabomberra area
- A supportive and motivated local approval authority (Council) and
- 1500 new residential blocks being built in South Jerrabomberra
- New Jerrabomberra High School site located within precinct.

#### **Current and future developments**

Stage One and part of Stage Two are under contract and includes:

• Satellite manufacturing facility led by • Purpose built innovation hub – Nova Systems and EOS

A range of Defence industry tenants

- A large-scale data centre
- incubator/start-up/co-working space
- Cyber Security capability.

#### Liz Dixon

liz.dixon@regional.nsw. gov.au

+61 429 314 229

investregional.nsw. gov.au/regions/ south-east-and-tablelands

# **WESTERN SYDNEY**

#### Key capabilities

Western Sydney has an established defence presence and strong capability with a number of Australian Defence Force bases, personnel, and facilities located across the region including:

- Royal Australian Air Force Base Richmond
- Royal Australian Air Force Base Glenbrook
- Liverpool Military Area, with significant army presence at Holsworthy and Moorebank
- Defence Establishment Orchard Hills.

The prime contractors co-located in these bases and facilities are supported by Australia's deepest supply chain of specialist SMEs in defence and adjacent industries located across Western Sydney, Australia's high tech industrial heartland.

This existing defence presence will soon be augmented by the Bradfield City Centre – Australia's new hub for sovereign capability in defence, space and aerospace.

The Bradfield City Centre is located in Australia's premier corridor for defence capability extending from Williamtown in the north, through Western Sydney and south to Nowra, the Shoalhaven and Capital regions.

The Bradfield City Centre will incorporate a national security quarter that will strengthen NSW's existing defence sector ecosystem, complementing established and growing capabilities in greater Sydney and across the region.

In addition, the NSW Government is progressing key investments in Western Sydney that will make it strategically attractive for an increased Defence and defence industry presence.

#### **Current and future developments**

#### Advanced Manufacturing Research Facility – opening in late 2023

NSW Government is establishing an Advanced Manufacturing Research Facility (AMRF) to support industry innovation, collaboration and growth across Western Sydney. The AMRF will be a shared use facility with cutting edge capability in advanced fabrication, including additive, composites, subtractive and automated manufacturing technologies as well as microelectronics focused on advanced packaging and assembly. This cornerstone investment by the NSW Government will support the growth of Bradfield as Australia's new hub for sovereign industrial capability while providing unprecedented opportunities to increase domestic content in the defence supply chain by leveraging Sydney's unparalleled industrial capability.

#### Sean Oke

sean.oke@wpca.sydney +61 449 611 226 wpca.sydney

PART OF THE REGIONAL DEFENCE NETWORKS PROGRAM SERVICE PROVIDER Ai Group

#### **James Scotland**

james.scotland@ aigroup.com.au +61 400 464 766

aigroup.com.au/sectorsand-advocacy/Defence/ defence-suppliers-network

# **New Education and Training Model (NETM)**

The NETM is a new model of tertiary education aimed at helping advanced industries access skilled labour \$37.4 million has been committed to the program over five years to provide more than 7,000 courses for almost 3,000 students.

#### **Contact us**

The NSW Government is keen to harness these investments to support capability development in the defence sector. Contact us on details on the previous page if you wish to discuss how these initiatives can support your firm to obtain competitive advantage while delivering on Australia's defence priorities.

# **RIVERINA-MURRAY**

Located in Southern NSW, the Riverina Murray is one of Australia's main food producing regions and a leader in advanced manufacturing with a significant defence capability and agribusiness industry. The region is well-connected to domestic and international markets and is on main transport networks linking Brisbane, Melbourne and Sydney.

With strong tertiary educational centres, the Riverina Murray is well placed to meet the future demand for skilled staff and to support students to complete their education in region.

# Key capabilities

#### **Capabilities**

- military training
- guided weapons and explosive ordnance
- propellant and explosive manufacturing, and munitions disposal
- specialist contract engineering
- helicopter maintenance and component overhaul
- targetry system design and manufacturing
- alternators and portable power solutions, and armored vehicle kits.

Primes in the region include Thales in Mulwala and BAE Systems at the RAAF Base Wagga.

#### **Strengths**

- diverse range of advanced manufacturing and construction capabilities
- highly skilled workforce
- large regional centres with two business activation precincts the Wagga Wagga Special Activation Precinct and the Albury Regional Jobs Precinct
- Strong digital connectivity
- National freight corridors connect the region to ports and international airports in Sydney, Melbourne and Canberra, and several intermodal freight hubs in the region
- remote large open spaces ideal for developments in UAV and space testing facilities
- lower cost of living than metro centres including economical industrial and commercial land and
- thriving localised supply chains.

#### **Debbie Lane**

debbie.lane@ regional.nsw.gov.au +61 417 362 509

investregional.nsw.gov.au/regions/riverina-murray

PART OF THE
REGIONAL DEFENCE
NETWORKS PROGRAM
SERVICE PROVIDER
Business NSW on
behalf of Defence
Riverina Murray

**Alliance** 

# **Anthony McFarlane**

Anthony.McFarlane@ businessnsw.com +61 439 389 486

defencemurrayriverina. com.au/defence-industry

# **Current and future developments**

#### The Riverina Murray region is home to:

- RAAF Base Wagga the major ground training base for RAAF
- Blamey Barracks Kapooka the Army Recruit Training centre
- Latchford Barracks and Gaza Ridge Barracks North East Victoria the Army Logistic Training Centre.

The Riverina Defence Redevelopment Program will see the large-scale redevelopment of three key Defence Training Bases located in the Riverina Murray. The approximately \$1.1B seven-year program will see the construction of infrastructure and facilities at RAAF Base Wagga, Blamey Barracks (Kapooka) in Wagga, and the Albury Wodonga Military Area.

#### **ADROITA**

#### Mission

Engineering success for sovereign capability.

# **Company summary**

ADROITA is a Defence Engineering professional services and business strategy consultancy. Their core purpose is engineering success for sovereign capability which is at the heart of everything they do. Future proofing Defence and Australian industry by providing customers with the best people, IP and technology solutions to solve their complex, high-impact problems and unlock their latent capability.

Established in 2016, ADROITA has a track record of providing expert advice to Defence and SMEs across our service lines. Today the business supports four areas:

- 1. Professional Services for Defence
- 2. Maritime Combat Systems Integration and Technical Services
- 3. ADROITA Advisory providing strategy advice to Australian SMEs
- 4. ADROITA AI and Decision Support, supporting our customers with complex decision support.

This is possible because they are adroit – being skillful and quick in the way they think and move. You can trust ADROITA to be curious about possibilities and exploring innovative solutions to solve your complex problems.

# Objective of participation at Land Forces

ADRIOTA's objective at Land Forces is twofold: to promote engineering consulting services to CASG, Major Service Providers and Primes; and promote advisory services to Australian SMEs seeking to enter or grow in the Defence sector.

## Key capabilities

ADROITA is an approved supplier on the Defence Support Services Panel, and partners with Major Service Provider Panel members to bring engineering expertise to Defence.



# Neville Teague General Manager

+61 402 100 124 neville.teague@ adroita.com.au adroita.com.au

#### **Services**

- Specialist Defence Engineering Services: Weapons, Integration, Maritime, C5ISREW
- Program, Product and Project Management
- Test and Evaluation
- Simulation and Modelling
- Transition Management
- Project Risk and Issues Management
- Systems and Software Engineering
- Commercial Services
- Contract Management and Contract Performance.

#### **Advisory**

- Strategic Business Advice for Australian SMEs
- A track record in supporting our clients to win Defence work.

# **Current and future developments**

Defence consultant of the year Sarah Pavillard, CEO ADROITA, was recognised at the Australian Defence Industry Awards as Consultant of the Year for her work on the \$10 billion Destroyer Assurance program.

Eurybia Consortium – In November 2021, ADROITA formed and led a consortium of Sovereign Australian SMEs with a spread of capabilities that contribute to Underwater Surveillance Systems. The first step is to contribute to the DST Community Advisory Group.

Partnership with Bectech – In February 2022 ADROITA signed a MoU with BecTech – an American Maritime Engineering Consultancy. The partnership is already delivering results with the companies currently working together to plan a technical trial for Navy.

Partnership with Engineering Business – In May 2022 ADROITA signed a MoU with Engineering Business – another Australian engineering SME – to augment the capabilities we can support our respective clients with.

New Business Lines – In the next twelve months ADROITA is establishing new business lines:

- ADROITA AI and Decision Support
- ADROITA maritime combat systems integration and technical services.

One of ADROITA's key values is partnering for success. Building on our existing partnerships, ADROITA seeks to identify potential partners to deliver sovereign capability for Defence.

# ADVANCED NAVIGATION

#### Mission

Advanced Navigation's mission is to drive the autonomy revolution with high reliability AI powered solutions.

#### Company summary

Advanced Navigation is a privately owned Australian company that specialises in the development of navigation technologies and robotics. The company has a focus on generating products of the highest quality standard, both in terms of hardware and software.

The company's founders came from a background in mission critical robotics built to military specifications and this can be seen through Advanced Navigation's products. Advanced Navigation's engineers have specialised expertise across a broad range of fields including sensors, GNSS, inertial navigation, RF technologies, acoustics, robotics, AI and algorithms.

# Objective of participation at Land Forces

Build brand awareness, and to generate new leads and sales for the company.

#### **Key capabilities**

Advanced Navigation develops industry-leading navigation systems for Defence and Commercial markets. As a global leader in air, land, and sea navigation, their solutions are designed for the highest level of performance at the lowest SWaP-C (size, weight, power consumption and cost).

Discriminators include greater mission endurance due to demonstrated lower SWaP-C, high accuracy dead-reckoning positioning, up to 12x improvement compared to equivalent industry-standards systems, and industry-leading technical support from qualified engineers.

#### **Current and future developments**

- Navigation systems: IMU and AHRS, GPS aided INS, Acoustic subsea positioning
- Bespoke navigation solutions
- · Acoustic subsea positioning.



# Eleanor Tomlinson Marketing and Events Executive

Eleanor.tomlinson@ advancednavigation.com +61 427 448 142 advancednavigation.com

# **ADVANCED POWER DRIVES**

#### Mission

Electrifying the sky.

### Company summary

Advanced Power Drives specialises in high performance motor control solutions. Every controller (APD) is engineered and manufactured in Sydney. Their vertically-integrated operation drives rapid innovation and ensures delivery of the highest quality motor controllers to global partners. With over a decade of experience in aerospace and defence, Advanced Power Drives solutions are flying in over 10,000 aircraft, ranging from sUAS, to heavy-lift cargo drones.

They collaborate with system integrators to develop optimised aerial powertrain solutions. Using experience across dozens of ground-up UAS propulsion implementations, their defence clients maximise their performance in the air, and provide an operational advantage on the battlefield.

# Objective of participation at Land Forces

To connect with vehicle integrators in the Defence sphere looking to maximise the performance, reliability, and efficiency of their electric powertrains with Australian-made motor controllers.

#### **Key capabilities**

Advanced Power Drives are specialists in motor control.

- Every motor controller is designed, manufactured, and tested in Sydney, Australia
- Motor Control solutions available from 1kW to 200kW+
- Leaders in next-generation Silicon Carbide switching technologies, enabling drive efficiency of over 99%
- Agile team of engineers and production technicians who can deliver flightready bespoke motor controllers in weeks, rather than years.

#### **Current and future developments**

APD is currently preparing for the release of GateKeeper, their next generation motor control platform. Over 3 years in development, GateKeeper brings the latest communications and motor control technology to a new line of motor controllers. The DRIVE series controllers encompass the full power range of the UAS market and is specifically designed for uncompromising demands of aerospace and defence.

APD also continues to work with customers in the defence space to enhance the electric capability of Australia and its allies, including powering leading C-UAS kinetic interceptor vehicles for the United States.



# Saamiul Bashar Program Manager

+61 478 007 176 saami@powerdrives.net powerdrives.net

# **AIR AFFAIRS AUSTRALIA PTY LTD**

#### Mission

Providing special missions aviation support for Australian and allied defence forces.

#### Company summary

Air Affairs Australia Pty Ltd (Air Affairs) is a highly capable and innovative special missions' aviation and engineering-based company that specialises in providing equipment and services to Defence Forces, major government departments and multinational companies.

The Air Affairs organisation is purpose built to best align with corporate governance, service delivery performance and regulatory frameworks. The company focus is on the provision of specialised services and the company organisation is indicative of this requirement.

Air Affairs has extensive design and manufacturing capabilities and is the Original Equipment Manufacturer (OEM) for several products used for special mission operations. These capabilities also support maintenance and repair activities, again meeting Defence and Industry requirements

#### Objective of participation at Land Forces

To expand current Phoenix Unmanned Aerial Target and aircraft Special Mission Operations and look to grow overseas Defence customers.

#### Key capabilities

Original Equipment Manufacturer for:

- MTR-101 Reeling Machine
- Phoenix Jet Target Drone
- Own and operate a fleet of special mission Learjet 35/36/60, Kingair B200T and Gulfstream GIV aircraft conducting ISR and Special Mission operations.

#### **Capabilities**

- Aircraft Maintenance
- Manufacturing
- Welding
- Operations of airborne multi-spectral thematic mapping scanners
- Service centre for Breeze Eastern helicopter rescue hoists
- Medical Retrieval
- CASA 147 RTO and Naval Defence Certificate 4 training.

#### **Current and future developments**

Air Affairs are looking to expand Australian operations to support global customers and work alongside international Defence and civilian agencies to provide world-class unmanned aerial targeting and aircraft special mission operations.



# Chris Sievers Chief Executive Officer

csievers@ airaffairs.com.au +61 412 428 579 airaffairs.com.au

# **AUSTEST LABORATORIES**

#### **Mission**

The mission and values of Austest Laboratories, state that they act with integrity, honesty and respect while providing clients with a quality service that is timely, accurate and impartial, using the latest standards and regulations.

# Company summary

Austest Laboratories is an independent testing and certification company, assisting manufacturers, importers and exporters in gaining access to local and international markets.

Established in 1991 Austest is the only full-service laboratory in Australia providing comprehensive accredited EMC, Electrical Safety, Telecommunications and Environmental test services. Fully accredited MIL-STD Testing includes Environmental product and component standards ranging from vibration and shock, drop, temperature and humidity, UV, Ingress Protection for Dust, Water and corrosion, altitude and pressure, through to Electrical safety and EMC radio frequency interference emissions (40GHz) and susceptibility (up to 200V per meter to 18GHz).

#### Objective of participation at Land Forces

To connect with local, national and international manufacturers and defence prime contractors and have an opportunity to identify any future industry testing requirements whilst promoting the accredited defence testing capabilities of Austest Laboratories.

#### Key capabilities

Austest Laboratories offers the most comprehensive range of defence testing services with the largest commercially available electrodynamic vibration and shock capability in the country as well as Temperature, Humidity, Altitude, Pressure, Salt-fog and Solar test chambers.

Accredited for major defence standards such as MIL-STD-461, MIL-STD-810, MIL-STD-167, MIL-STD-202, DEF STAN 00-35 and RTCA DO-160 along with testing capabilities for accelerated aging, UV-A and UV-B radiation, solar radiation and salt (corrosive) atmospheres.

Austest Laboratories' EMC testing capacity offers emissions, immunity and wireless test capabilities encompassing the majority of global product and industry standards. Testing capability areas include radiofrequency emissions and immunity, surges, transient burst and electrostatic discharge, short-range device (wireless) spurious emissions testing, on-site surveys, EMC pre-compliance testing, antenna radiation pattern measurement as well as consulting services.



# Brett Coleman Managing Director

austest@austest.com.au +61 2 9680 9990 austest.com.au

# Unique selling proposition

- 'One Stop Shop' the only independent facility in Australia providing environmental, EMC and electrical testing in one location
- Formally accredited for major defence standards
- Test engineers with extensive defence industry experience
- Modern laboratory facilities enabling reduced testing times.
- Expert consulting services for vibration, shock, acoustics and EMC design.

# **Current and future developments**

Continually investing in equipment and expertise to meet customer and regulatory requirements.

# **BAKER & PROVAN**

#### Mission

High quality manufacturing and engineering for heavy industry and Defence.

# Company summary

Baker & Provan is a family-owned, Australian engineering company established by two ex-service men, Arthur Baker and Don Provan in 1946. Today, the company provides heavy manufacturing and on-site services to Defence and industry in fitting, fabrication and heavy CNC machining. Baker & Provan also provides onsite work and servicing of mechanical and hydraulic equipment for the Royal Australian Navy and shut down and repair work for industry.

# Objective of participation at Land Forces

Baker & Provan is seeking to grow its presence in the Australian Defence space as a trusted supplier to the ADF with relatively unique heavy capability in mechanical and hydraulic manufacturing and servicing capabilities across Australia.

# Key capabilities

What makes Baker & Provan unique is its heavy fabrication and CNC machining capability for Defence and industry, with a 32 tonne lift capability within its large workshop in western Sydney. Baker & Provan has small to very large 18 CNC machines, along with heavy fabrication and mechanical and hydraulic fitting capabilities. They employ 80 people dedicated to providing quality engineering solutions across Australia.

Baker & Provan have key accreditations for quality, safety, Defence Security and maintenance of marine and naval equipment.

#### Current and future developments

Baker & Provan is expanding its role as a Defence manufacturer and service provider seeking to support Defence primes in manufacturing for Australian Defence projects as well as partner with larger international Defence providers for local support and service requirements.

# BAKER & PROVAN

# **Steve Zakaria**Sales Manager

+61 493 295 725 steve.zakaria@ bakerprovan.com.au

bakerprovan.com.au

# **BLUECATS**

#### **Mission**

Provide digital awareness that enables confident decisions.

# **Company summary**

BlueCats is a 100% Australian owned software and technology SME headquartered in Sydney. BlueCats are experts at Digital Transformation via Real Time Location Solutions (RTLS), such as asset and people tracking, and the digitisation of manual and complex workflows.

Recent examples of BlueCats digital transformation solutions are:

- OneTag<sup>™</sup> Digital isolation management solution eliminating all manual administration of isolation management whilst significantly enhancing compliance during Naval maintenance activities
- Digital SwMA Complete digitisation of the RAN's Seaworthiness Materiel Assessment process from management, deployment through to in field completion and reporting.

BlueCats develops the right solution for the right people.

### Objective of participation at Land Forces

BlueCats wants to connect with Defence Forces and companies who are looking to digitise workflows and manage maintenance activities across asset classes, whilst increasing safety and compliance.

#### **Key capabilities**

- 100% Australian owned SME
- Agile and responsive development teams
- Collaborative stakeholder engagement throughout the discovery process
- Intimate understanding of Defence specific requirements
- ISO27001 & DISP accreditation.

#### **Current and future developments**

BlueCats has developed and launched OneTag™, a digital Isolation management solution. OneTag™ is an efficient, and engaging way for Navy crew and contractors to plan and manage the isolation process as it relates to maintenance and repair activities on Naval vessels.



# Nathan Dunn Chief Executive Officer

nathan.dunn@ bluecats.com +61 410 484 070 bluecats.com

# OneTag<sup>™</sup> benefits:

- Fully compliant with Naval policy (ANP4202 Chapter 10)
- Eliminates all manual administrative burden on crew and contractors prior, during and post a maintenance activity
- Immediate positive impact crew wellbeing
- Real time visibility of the status of a ship's systems at any stage during maintenance
- Dynamic configuration management
- Enforces Naval policy, every time an isolation is performed.

BlueCats believes OneTag™ can have an immediate and positive impact wherever large scale maintenance activities are undertaken.

#### **BPS DEFENCE**

#### Mission

Provide valued defence sector programme and project management expertise to help build Australian Sovereign Industry Capability.

#### **Company summary**

BPS Defence is an Australian owned project management services company providing private sector project expertise and excellence to the Defence LAND, SEA, AIR and JOINT Domains.

They are committed to collaborating with Defence MSP and Prime Partners to deliver project management excellence in outcomes on behalf of clients.

Founded in 2016, their personnel are credentialled to the Project Management Institute (PMI) and the Australian Institute of Project Managers (AIPM). Their extensive knowledge of and experience in applying the principles and frameworks outlined in the 'Project Management Body of Knowledge', (PMBoK), is highly valued within the Defence Sector.

# Objective of participation at Land Forces

BPS Defence offers experienced and successful project delivery solutions and outcomes for Land Forces attendee organisations.

#### **Key capabilities**

BPS Defence is DISP security credentialled with extensive and successful private sector project delivery experience and Systems Program Office (SPO) leadership.

We are currently deployed on several Australian defence projects.

Our services include:

- Program and project management
- Sustaining capital project delivery experience for Defence Estate and Infrastructure upgrades
- Sustaining product integration and delivery (including joint data networks)
- Project scheduling (Open Plan Professional, Primavera, Microsoft Project, and IMPPACT software)
- Risk and issue management
- Cost modelling and project cost control
- Commercial and contract management
- Learning and development
- Quality and safety management.

#### Capacity planning

Authoring and writing services.



# David Bridge Chief Executive Officer

+61 421 588 658 david.bridge@ bpsdefence.com.au bpsdefence.com.au

# **Current and future developments**

BPS Defence can assist international partners in successfully integrating and delivering their products and or services into the Australian land, sea, air and joint defence domains.

They understand the requirements of and are experienced in the delivery of Complex Project Management.

Across multiple industry sectors, BPS Defence personnel have strong experience in the design, establishment, and successful performance of Systems Program Offices (SPO), colloquially, the PMO. This includes the resourcing of the SPO's.

Therefore, BPS Defence can provide its prospective international partners with an efficient and effective 'whole of project or product delivery service'.

# **DEFENCE INNOVATION NETWORK**

#### **Mission**

Defence Innovation Network (DIN) helps businesses to be more competitive and innovative on a global scale by improving the translation of research into defence products and services developed in NSW.

#### Company summary

DIN is a university-led initiative of the NSW Government and the Defence Science and Technology Group to enhance NSW Defence industry capability through collaboration between industry and universities.

Since its establishment in 2017, DIN has attracted over 100 projects representing more than \$90 million in cutting-edge defence-related R&D investment to NSW, leading to already commercialised new capabilities and near-to-market next-generation innovations. The DIN's recent successes include the \$1.5 million investment to develop the world's first quantum sensing porotypes and a \$1.5 million investment to deliver breakthrough technology in Cyber, Remote Undersea Surveillance, Space and Information Warfare.

#### Objective of participation at Land Forces

DIN's objective is to create new opportunities for NSW researchers and defence companies, and build new connections with major defence primes, the Australian Defence Force and defence organisations in allied nations, including the US and UK.

#### **Key capabilities**

- Quantum Sensing and PNT
- Cyber
- Remote Undersea Surveillance
- Space
- Information Warfare
- Robotics, Artificial Intelligence and Machine Learning
- Advanced Manufacturing and Materials
- CBRN
- Human Performance.

#### Current and future developments

DIN is currently collaborating with Australian and US Military and agencies involving:

- Quantum science technologies (PNT and secure communications)
- Al robotic coordinated autonomous teams
- Neuromorphic sensor technologies (space, ground and undersea)
- Advanced materials (including Drone Disruptive Camouflage)
- Counter misinformation and malign influence.



#### Lucia Kralova

#### **Network Manager**

lucia.kralova@ defenceinnovationnetwork. com

+61 490 121 084

defenceinnovationnetwork.

#### **DRONESHIELD**

#### Mission

Detection and defeat of nefarious drones.

#### Company summary

DroneShield (ASX:DRO) provides Artificial Intelligence based platforms for protection against advanced threats such as drones and autonomous systems. Offering customers bespoke counterdrone (or counter-UAS) and electronic warfare solutions and off-the-shelf products designed to suit a variety of terrestrial, maritime or airborne platforms.

Their customers include military, intelligence community, Government, law enforcement, critical infrastructure, and airports globally.

#### Objective of participation at Land Forces

DroneShield provides ADF with counterdrone and Electronic Warfare capabilities. They are seeking to extend that business through meeting various stakeholders at Land Forces.

#### Key capabilities

- Counterdrone
- Electronic Warfare
- ISR.

#### **Current and future developments**

- Next generation counterdrone systems
- Advanced Electronic Warfare and ISR systems.



## Oleg Vornik Chief Executive Officer

+61 400 270 474 oleg.vornik@ droneshield.com droneshield.com

#### FIFTY ZOO

#### **Mission**

Building Sovereign Defence Capability by designing future-ready mission critical technology and systems.

#### **Company summary**

Experience-led digital innovators designing mission critical technology and systems.

A sovereign organisation with proven ability to connect people with technology and create user experiences and solutions that drive outstanding mission critical systems.

The solutions they engineer and design for corporate, government and defence clients are breaking new ground in human-centered design and setting new standards for Australian technology.

Based in Sydney, with operations in Canberra, they are a team of designers, information architects, engineers, and strategists with a core focus on:

- Human Machine Interface (HMI) Engineering, Design and Architecture
- Digital Product Strategy and Design
- Information Architecture
- Technology Research
- End-user Operational Research and Requirements
- Digital Product Usability Testing and Validation.

#### Objective of participation at Land Forces

Showcasing capability and experience in Defence and Federal Government to help win and grow sovereign capability and resilience by developing new partnerships with other sovereign Defence organisations.

#### Key capabilities

A sovereign organisation specialising in:

- System and Solution Design
- Human Machine Interface (HMI) Engineering, Design and Architecture
- Digital Product Strategy
- Technology Research
- End-user operational research and Requirements
- Digital Product Usability Testing and Validation.

Working alongside our partners to create digital products that deliver critical features and functions to:

- Simplify complex systems
- Reduce cognitive load through optimised interface design
- Deliver contextual information, enabling faster responses
- Reduce training and onboarding time through intuitive design.



### Tony Ockleshaw Chief Executive Officer

tony.ockleshaw@ fiftyzoo.com +61 413 963 051 fiftyzoo.com

#### **Current developments**

- Research and design of the Coordin8 Emergency Management Platform
- Partner in the C4 EDGE program for the Australian Army
- HIVE Communications solution
- Research and design of the openSIL cloud-based Systems Integration Lab
- Sovereign Space Industry Strategy.

#### **Future developments**

- Strategy, Research and technology design on: AIR6500, LAND200, LAND400, LAND75, AIR2025, SEA5000
- Developing an Innovation Lab in Canberra to better support the ADF.

#### **GLOBAL DEFENCE SOLUTIONS**

#### Mission

Global Defence Solutions (GDS) sees a world where the safety and wellbeing of others is a priority and continually improved through innovation and meaningful solutions.

#### Company summary

Whether being used during military operations or disaster relief, using responsive, scalable, adaptable, fit-for-purpose deployable force infrastructure is vital.

GDS create smart, safe, highly mobile, MIL-SPEC and non-MIL-SPEC solutions helping military and emergency service personnel perform to their best. Coupled with through life Australian based support makes GDS a force in field support.

The recent inclusion of a dedicated Textiles Facility in NSW allows for immediate Australian based textile design, manufacture, repair and overhaul services providing sovereign solutions and reducing supply chain risks.

With quality accreditations 9001:2015, 14001:2015, 27001:2013 and ISO 45001:2018, GDS is ready to support.

#### Objective of participation at Land Forces

Australian owned, and based in regional NSW, GDS aim to develop strategic partnerships with like-minded organisations, Australian and international, during Land Forces 2022 resulting in delivering innovative, meaningful and impactful solutions today and into the future keeping people safe.

#### **Key capabilities**

- Australian product design, manufacture, repair and overhaul services reducing supply chain risk
- Australian solutions designed and configured to suit customer's capability requirements
- Australian Through Life support available for all products at field, barrack or base
- Provision of solutions quick and easy to deploy and re-deploy
- Quality Accreditations 9001:2015, 14001:2015, 27001:2013 and 45001:2018.



#### **Laurie Koster**

Chairperson, Resilience Logistics Solutions

+61 412 800 555 Lkoster@alkath.group globaldefence.com

#### **Current developments**

- GDS is currently providing integrated trainer containers to Thomas Global Systems
- GDS has partnered with Saab Australia to deliver JP 2060 Phase 3 Australia's Deployable Health Capability Program.

#### **Future developments**

- Protect and project GDS, and the wider Shoalhaven, as a trusted regional partner of choice GDS, in partnership with the Shoalhaven Defence Industry Group (SDIG), continue to represent the Shoalhaven as a great place to live, work and do business. All crucial to creating a prosperous and regional partner of choice for international industry partners and our nation's end-users.
- Continuing to grow GDS New Zealand to deliver true core and enhanced capabilities across the Tasman – GDS recognise that New Zealand is also seeking security for its national economic and environmental wellbeing and resilience. GDS New Zealand will become the gateway for the GDS Australia products and services by identifying local partners who understand and respect our culture and brand.

#### Mission

Empowering people to feel safe and connected.

#### **Company summary**

For over 60 years, GME has been an industry leader in the RF communication technology space where they are the only Australian manufacturer of UHF CB Radios and Emergency Beacon products.

Located in Sydney's western suburbs, they operate from our purpose-built headquarters, employing over 200 staff. This state-of-the-art facility houses Research & Development, Engineering, Quality Assurance, Manufacturing, Warehousing, Sales and Marketing, Finance and Technical Service functions. They pride themselves on engineering and manufacturing high quality, market-leading products to suit the specific requirements of customers.

Today GME proudly remains a family-owned private company and is proudly 100% Australian.

#### Objective of participation at Land Forces

Seeking to partner with companies that are looking to increase their AIC content, they are interested in technology transfers and Sovereign electronic manufacturing. Show casing codified solutions already in use within Defence.

Products codified are XRS370 (UHF CB radio), AE4018K1 (6.6dBi/medium gain antenna), VC2S (12V DC voltage Converter), MT600G (GPS EPIRB).

#### **Key capabilities**

- Scalable on-site manufacturing capability
- Accredited zone 4 High Assurance electronics manufacturing capability
- · Offers OEMs significantly higher Sovereign Industrial Capability
- Technologically advanced surface mount technology, optical inspection, and X-Ray manufacturing Equipment
- Defence Industry Security Program (DISP) Member
- Accredited Australian trusted trader
- ISO 9001-2015 Manufacturing process accreditation AS/NZS.

#### Current and future developments

Zone 4 electronics manufacturing within Australia – partnering with international organisations to successfully manufacture for a higher content of AIC. Also, able to undertake a technology transfer to support a sovereign approach. GME's Zone 4 upgrade will enable electronics manufacturing to be done at a secure high assurance level.



# Winslow Tam Defence Program Manager

wtam@gme.net.au +61 408 226 071 gme.net.au

#### **HUNTERNET COOPERATIVE**

#### **Mission**

Promoting Hunter Defence industry expertise to drive manufacturing, supply and sustainment opportunities to the region.

#### Company summary

Hunter Defence is a collaborative task force that represents over 100 companies focused on demonstrating the capability of established Hunter defence industry suppliers to government and primes, as well as upskilling local SMEs to become 'Defence ready'.

Hunter Defence's role includes demonstrating Hunter Region Supply Chain Capability to the Capability Acquisition and Sustainment Group (CASG), the Office of Defence Industry Support (ODIS), and Defence Primes. This is done by understanding what defence capabilities are generated regionally, aligning local industry capabilities and capacities with upcoming opportunities, and encouraging small and medium enterprises within the region (SMEs) to form advanced defence capability groupings and synergising broader product offerings by closer collaboration.

#### Objective of participation at Land Forces

Demonstrate the value proposition of the regional industrial capability in the Land domain and to provide guidance to SMEs of the opportunity to partner with major defence primes and contract opportunities.

#### **Key capabilities**

Hunter Defence's key regional industry capabilities are as follows:

- Systems architecture development
- Artificial intelligence systems
- Virtual and augmented reality systems
- Unmanned system development
- Advanced land systems consultancy
- Worlds class simulation systems development
- Battlespace management and sensor design and support
- Armour plating systems and high tolerance machining
- High end composite development
- Missile seeker head technology and Missile system body development
- Missile system integration
- Rocket propulsion systems
- Explosives support, storage and technology development
- Small arms support.



### Tim Owen Chair

tim.owen@ hunternet.com.au +61 477 201 000 hunterdefence.org.au

Download the full Hunter Defence Capability brochure via this link:



# ILLAWARRA SHOALHAVEN DEFENCE INDUSTRY

#### Mission

To promote and expand the Illawarra Shoalhaven defence capabilities whilst advocating to all levels of Government on behalf of the region.

#### Company summary

Illawarra – Shoalhaven is connected to domestic and international markets via high-quality broadband, road and rail connections into Sydney, NSW's third largest port at Port Kembla and the Illawarra Regional Airport.

Australia's centre for naval aviation, the Shoalhaven has extensive capabilities across joint domains in land, sea and air. It has a dedicated technology adjacent to HMAS Albatross with access to the base and runways. It is also a major centre for helicopter crew training.

Illawarra successfully provides solutions to defence. Armoured steel for Collins-class submarines, Adelaide-class frigates and Hobart-class Air Warfare Destroyers were all manufactured in Wollongong.

The defence industry network includes the Illawarra Innovation Industry Network (i3net), Shoalhaven Defence Industry Group (SD&IG), Invest Wollongong, Shoalhaven City Council, Business Illawarra, University of Wollongong, NSW and Australian Governments.

#### Objective of participation at Land Forces

Promote industry capabilities to attract business, investment and jobs to the region and introduce its organisations to supply chain opportunities.

#### **Key capabilities**

#### Illawarra

- Armoured steel plates
- High-end welding and engineering
- · Advanced fabrication
- Blasting and metal preparation
- Electrical isolators and enclosures
- Specialist protective coatings
- Ruggedised medical computing devices and communication systems
- · Gearbox manufacturing
- Engineering design
- On-site services
- · Project management services.







#### **Tony Dyer**

Business Development Manager

+61 419 093 081

tony.dyer@ regional.nsw.gov.au investwollongong.com.au

### Donna Payne

Acting Deputy Director

donna.payne@ regional.nsw.gov.au

+61 417 497 869

shoalhavendefence.com.au

#### **Shoalhaven**

- Accredited Aircraft Maintenance Engineer Training
- Advanced Manufacturing
- Anti-Submarine Warfare Training and Testing
- Armour and exotic material processing
- Avionics test and repair
- AIR9000 Phase 8 Sustainment
- Deployable infrastructure Build and Maintain
- Electronic Warfare Testing and Validation
- Humanitarian Assistance and Disaster Relief Training
- Jet Air Support
- Joint Adversarial Training and Testing Services (JATTS)
- Joint Airborne Rescue Services (JARS)
- Medical Support and Retrieval
- Project SEA129-5 Maritime Tactical Unmanned Aerial System (MTUAS)
- Provision of Aerial Target Services from Aircraft
- Proximity to Jervis Bay and Naval Eastern Exercise Area
- Search and Rescue
- University of Wollongong Industry 4.0 Hub research, training and industry partnerships.

#### **Current and future developments**

The Illawarra/Shoalhaven region provides a world class innovation ecosystem for international businesses to create a presence to drive Defence industry collaboration and partnerships.

- Albatross Aviation Technology Park (AATP) is designed specifically to support defence and aviation industries. The 35-hectare estate adjoins the airfield of HMAS Albatross and is connected by taxiways to the base
- Wollongong is an hour south from Sydney and its international Airport
- Close proximity to defence facilities, including Garden Island, HMAS
- Albatross and HMAS Creswell
- Port Kembla a deep water port, provides businesses based in Wollongong with access to global markets and is situated five kilometres south of the Wollongong CBD
- Leading Defence research and development organisations established by or in partnership with the University of Wollongong (UOW), DMTC, Smart Infrastructure Facility, the Steel Research Hub and the UOW Institute of Cybersecurity and Cryptology
- BlueScope is developing a Master Plan for the Company's 200 hectares (500 acres) of excess landholdings adjacent to the Port Kembla Steelworks.

#### JENKINS ENGINEERING DEFENCE SYSTEMS

#### Mission

To supply and support customers with excellence.

#### **Company summary**

Jenkins Engineering Defence Systems Pty Ltd (JEDS) is a wholly Australian owned company specialising in the design, manufacture and marketing of Electronic Warfare products – including software; and the service and support of EW, radar and radio communications systems.

JEDS has specific expertise in equipment design, manufacture, repair and overhaul, test, calibration, antenna measurement and software support for a range of Defence, Government and commercial customers and offers a wider project management, systems engineering, training and configuration management capability.

JEDS has supported the Australian Defence Force (ADF) since it was founded in 1989 with 2800m² facilities in Sydney, NSW and 1000m² facilities in Rockingham, Western Australia.

#### Objective of participation at Land Forces

Generate leads, engage with sector, increase visibility, increase export opportunities – in particular, In-Service Support (ISS) services to the Australian Army.

#### Key capabilities

JEDS maintains a significant Investment in Specialised Test Equipment:

- 10m x 5m x 5m fully automated Far Field Anechoic Test Chamber (0.4-40 GHz)
- 7.2m x 4.8m x 4.8m 7-axis 7 measurement mode Near Field Scanner Anechoic Chamber (0.5-40 GHz).
- Comprehensive range of RF and Communication Test Equipment up to 40 GHz.

The majority of JEDS 45+ employees:

- Maintain high-level (NV1 and NV2) national security clearances
- Have ADF, Department of Defence or Dockyard experience
- Hold relevant Degree or Diploma level qualifications
- Undergo continuous training / improvement programs both locally and overseas.



## **Lester Sutton**General Manager

+61 418 849 241 Lsutton@jeds.com.au jeds.com.au

#### **Current and future developments**

JEDS Direction-Finding (DF) Periscope Antenna Unit (PAU) is used aboard all Collins-class submarines; JEDS Lowband DF subsystem is integrated with the ES-3701 Radar EW system used aboard all RAN Destroyers and Frigates; and JEDS PulsPro EW analysis software is used by RAN and exported to both the UK and the US (NAVAIR). JEDS also provides in-service support to the Multi-Spectral Surveillance System on the Australian Army's ASLAV-S and offers similar capabilities for other Land-based electronics equipment, e.g. radars.

JEDS is on the third Phase of a Defence Innovation Hub project developing an Australian sovereign radar EW support system which will have application to all three environments (Land, Maritime and Aerospace). This system is designed to fill an identified 'gap' in the western-world defence market that has applicability to seaborne constabulary missions in the northern Mediterranean littoral.

JEDS DF PAU is currently advertised in the Australian Defence Sales Catalogue (p. 61) as a Periscope Antenna Subsystem (PASS). It is planned to be reconfigured for siting within an Optronics Mast for Collins' Life of Type Extension (LOTE) which will improve its exportability to 5-eyes and other allied (e.g. NATO) countries.

#### **McCONAGHY**

#### Mission

Bringing high-performance composite prototypes to life, from concept to production.

#### Company summary

An enviable 50+ years track record in the marine industry maintaining reliable, consistent and innovative on every project.

They design, manufacture, install and maintain composite structures where there is no room for error with:

- Bespoke lightweight composite solutions, including conversion of metallic components into lightweight, corrosion-free and fatigue-free components
- Machining and bonding of syntactic foams into complex 3D structures
- Full product lifecycle management: 2D and 3D design, engineering, prototyping, testing, manufacture, installation, repairs and upgrades
- We work to customers' specific requirements and build a long-term relationship in the process.

#### Objective of participation at Land Forces

Expand network with industry along with displaying capabilities to potential and existing client base.

#### Key capabilities

The McConaghy track record in composites is unparalleled for the last 50 years.

With the need for light weight, corrosion and fatigue free components being a key performance indicator for industrial, marine and military applications.

McConaghy are the subject matter experts for all solutions.

#### **Current and future developments**

Undertaking technology upgrade and manufacturing techniques which include improvements to our existing CNC and future robotic cutting and laser measurement systems.

#### McCONAGHY

## **Eric Desjardins General Manager**

eric@mcconaghyboats.com +61 405 944 679 mcconaghyboats.com

# MERCURY INFORMATION SECURITY SERVICES

#### **Mission**

Mercury Information Security Services (Mercury) is one of Australia's established, independent cyber security firms with a pragmatic focus on technical expertise and skills.

#### Company summary

Mercury are a sovereign provider of information security services, advice and consulting in Australia, specialising in digital assurance and threat emulation.

Established in 2015, the organisation has conducted over 700 engagements in the seven years. Additionally, they provide specialised platforms, design reviews alongside consulting and advice in cybersecurity.

#### Objective of participation at Land Forces

Mercury is seeking to enhance its established cyber security capabilities in assessment, assurance and governance into projects within land forces.

Land Forces will provide Mercury with an opportunity to engage with a variety of key defence industry stakeholders.

#### Key capabilities

Mercury has the following Key capabilities:

- 1. Penetration testing services, including threat emulation
- 2. Preparation for and Assessment against the Australian governments Information Security Manual (ISM) through the InfoSec Registered Assessors Program (IRAP)
- 3. Secure development support, including Security Architecture, Governance and Engineering.

#### **Current and future developments**

Mercury is in the process of evolving its test and evaluation capability to meet needs stipulated in the Defence Test and Evaluation Strategy. They are seeking existing developers and owners of networks and mission systems to validate services which leverage existing cybersecurity and defence knowledge.



#### **Edward Farrell**

#### Director

+61 414 830 713 Edward.farrell@ mercuryiss.com.au mercuryiss.com.au

#### MILSPEC MANUFACTURING

#### Mission

Milspec Manufacturing is the only supplier in the world that manufactures high power Mil 461 certified, permanent magnet alternators for military vehicles.

#### Company summary

Milspec Manufacturing is an Australian owned designer and manufacturer of alternators and power systems. Their unique offering uses permanent magnet alternators for vehicle power, delivering 100% of alternator output at vehicle idle. These same alternators are used in the following applications:

- Vehicle primary electrical power delivery
- Vehicle auxiliary power delivery
- Portable DC to DC power delivery
- Field power generation.

Milspec Manufacturing's full product range features auxiliary power units, exportable power modules, exportable power modules, power distribution units, vehicle C4i installation kits, enclosures and racking, and cable systems

#### Objective of participation at Land Forces

To promote range of Mil 461 certified permanent magnet alternators.

#### **Key capabilities**

Milspec Manufacturing offers a one stop shop in electromechanical integration, their 20-year history of integrating complex electro mechanical assembles in a secure, competent, systems focused environment delivers a unique capability to defence customers.

Key customers include:

- BAE-Nulka Decoy Canister system. Complete manufacture and test
- Australian Department of Defence Integration on G-Wagon, Cable harnesses, C4i kits and PDU's
- Polytronic-Live fire target systems-design and manufacture
- Meggitt-Weapon Modifications
- Thales-Alternators for Bushmaster
- Navistar-Milspec Alternators
- Rheinmetall, manufacture of vehicle kits and storage boxes.



#### **Alexander Dampier**

Business Development Manager

+61 429 449 546 alexdampier@ milspec-mfg.com.au milspecmanufacturing. com

#### **Current and future developments**

Milspec Manufacturing has developed a 900 Ampere permanent magnet Mil grade certified alternator suitable for armoured personnel carriers, infantry fighting vehicles and Auxiliary Power Units.

Their 300 Ampere alternator is currently being used by the Indian army for trials of Advanced towed Artillery Guns System (ATAGS).

Currently in talks with Defence primes in Asia as well as the Americas they seek to expand into the EMEA region with their unique permanent magnet alternator offering.

#### **NUPRESS**

#### **Mission**

To provide engineered components and products to a global customer base, enabling their visions to become reality.

#### **Company summary**

Established in 1971, Nupress has evolved to become a leading advanced manufacturer providing machined components and assemblies specializing in high tolerance precision machining. With AS9100 Quality Management certification, Nupress provides 'First Class Quality' outcomes across a range of industries including Aerospace and Defence. Their head office and manufacturing facility is in Cardiff, NSW near the Williamtown RAAF base.

With engineering, design and drafting capabilities, a strong supply chain network and expertise in managing complex projects and logistics combined with state-of-the-art equipment, LEAN processes and mature cyber security processes allow Nupress to offer a full turnkey manufacturing service.

#### Objective of participation at Land Forces

Connect with businesses looking for a 'First Class' supply chain partner.

#### Key capabilities

Capabilities include:

- High Tolerance Precision Machining
- 5 axis simultaneous machining 1500mm x 400mm, Trunnion Style and Millturn
- Done in One Multitasking Dual spindle parts transfer
- Milling up to 1400mm x 1200mm x 1325mm envelope
  - High Torque Horizontal Machining
  - High Speed Horizontal Machining
  - Vertical Machining
- Turning
  - all sizes up to 600mm diameter and 3000mm in length
  - automated processes
- Co-ordinate measuring
- · Contour measuring and thread verification
- High speed wire cutting 600mm x 400mm x 310mm
- 'First Class' Quality Processes
  - AS9100 Accreditation and ISO9001
  - AS9102 FAIR First Article Inspection Reporting
  - Production Failure Mode and Effects Analysis (PFMEA) Measurement Systems Analysis (MSA), Statistical Process Control (SPC)
  - Controlled environment machining



### Steve Mellon

Australian Sales Manager

+61 448 294 599 steve@nupress.com.au nupress.com.au

- Mature Management Systems
  - Tailored customer solutions
  - Work
  - Internal Audit Function
  - NIST 800-171 Compliant and Mature Cyber Security Systems
  - 24/7 ITAR Facility and Controlled Data Systems
- 20 years of export experience to North America, Asia Pacific and Europe
- Extensive supply chain with ability to supply difficult to source materials and processes
- Design, engineering and support services.

#### **Current and future developments**

- Contracted for F35 global supply chain with Pratt & Whitney
- Supplying Rheinmetall and sub-tier suppliers on Land 400 Phase 3 Boxer CRV.
- Boeing Space
- TAE Jet Turbine
- BAE systems
- Thales
- Cablex
- Boeing Defence Australia.

#### **REACH ROBOTICS**

#### Mission

Extend human reach into harsh environments.

#### Company summary

Reach Robotics was established in 2016 with the aim of revolutionizing robotics for harsh environments, removing people from harm, and increasing the productivity of remote systems. The company creates advanced robotic arm solutions which enable complex inspection and intervention in military and police operations and its technology is in use by the US and UK militaries.

More recent developments include the implementation of Machine Vision techniques to provide a great level of autonomy to task completion. Other commercial applications include infrastructure inspection for the offshore energy and petrochemical markets, and support to novel research programs for uncrewed systems.

The company has grown considerably to 40+ staff, a global sales and support footprint, and a strong research and development capability. Reach Robotics has its headquarters and manufacturing facility in Sydney, Australia.

#### Objective of participation at Land Forces

Sell technology into robotic bomb disposal operations.

#### Key capabilities

World leading remote, robotic manipulation technology.

#### **Current and future developments**

Reach Robotics currently has development in a broad range of manipulator focussed solutions including, space exploration and deep-sea operations. Our next generation of manipulators will provide an unmatched capability for land EOD robots. An increased level of dexterity and lifting capacity as well as 3D vision for autonomy and improved operator perception. Reach Robotics currently works with several overseas partners in the marine defence sector and is looking to expand this further into land robotics systems through partners in Israel and the US.



### Anders Ridley-Smith Director

+61 413 393 791 a.ridley-smith@ blueprintlab.com reachrobotics.com

#### **ROJONE**

#### Mission

To provide customers with quality products that meet or exceed their demands through open, honest communication.

#### Company summary

Rojone was established in 1981 and has become one of Australia's leading RF, C4I and Microwave design, and manufacturing companies. Its modern facilities occupy over 2,000 square metres in Ingleburn, NSW. A team of over 50 dedicated professionals has significant years of RF and production experience, allowing it to service over 2,000 domestic and international customers. Their customer base includes all major Australian Defence Primes, the Department of Defence directly, and leading telecommunications and mining companies.

Rojone's Australian-designed defence products and services include GPS Repeaters, Noise Attenuating Communication Headsets, GPS Antennas, RF and FO cable assemblies, and in-house build-to-print service.

#### Objective of participation at Land Forces

To promote locally designed and manufactured communication products.

#### **Key capabilities**

#### **Key Strengths**

- 40 years' experience in RF communications
- Well-equipped and committed to equip as required
- Financially sound
- Committed to Australian manufacturing
- Highly experienced management team
- Balanced customer mix (Defence, Telecommunications, Mining).

#### **Capabilities**

- Coaxial, Multicore and Fibre Optical Cable assembly
- Manufacture and design of GPS products (Antenna, Repeaters, Spitters)
- Australian made and certified high noise headsets customisable to customers exact needs
- CNC production of Semi-rigid cable assemblies
- In house connector over moulding
- Phased match cable assemblies.



#### John Brady, CSC General Manager

+61 419 491 881 John.Brady@rojone.com.au rojone.com.au

#### Unique selling points

- Female owned and veteran employer
- IPC certified technicians
- Only CNC Semi-Rigid bender in Australia
- Over 150 years of staff knowledge in radio frequency.

#### **Current and future developments**

- Land 400 Phase Two Rheinmetall Defence Australia/Department of Defence, increase the provision of Australian communication components within the vehicle
- Land 400 Phase Three Rheinmetall Defence Australia/Hanwha (TBC), increase the provision of Australian communication components within the vehicle, targeting Rojones own GPS repeater
- RAAF (Hypersonic Flight), continue to work with Times Microwave Systems (USA) to establish local assembly of SiO2 cable assemblies capable of working to temperatures up to 900 degrees Celsius
- Complete upgrade of local facility to be using 100% renewable energy by the end of 2022
- Work with Scott cables (UK), to sell Rojone designed, and locally manufactured GPS repeater to the UK Army
- Upgrade Rojone Quality Management system from ISO9001:2015 to AS9100, to better support aerospace industries in NSW.

#### **ROXTEC AUSTRALIA**

#### Mission

Protecting life and assets.

#### **Company summary**

Roxtec Cable and Pipe Seals provide reliable protection against risk factors that are present at all times in military and harsh environments. The system is easily adaptable to cables and pipes of different sizes and protects against fire, gas, water, dust, blast, pests, pressure and temperature changes, and EMI. It also reduces noise, vibration, and material fatigue. It exists in versions for EMC, hazardous locations (Ex) and bonding, grounding and lightning protection.

The system is certified by all major classification authorities. Roxtec Australia has serviced the Australian/New Zealand Defence Industries for over 15 years. We Seal Your World<sup>TM.</sup>

#### Objective of participation at Land Forces

To further develop awareness and relationships with Primes and SME'S especially for Land 400 phase 3 and Land 555 Phase 6.

#### Key capabilities

#### **Strengths**

- Roxtec is the world leading manufacturer of sealing solutions for cable and pipe transits
- Roxtec Australia Pty Ltd has been present within the Australian market since 1996
- We are the leading supplier of cable and pipe transits in Australia
- Local Sales, Support and Distribution located in Sydney and Perth with inventory available for fast supply.



#### Mike Coburn

**National Sales Manager** 

+61 467 001 436 mike.coburn@roxtec.com roxtec.com

#### **Capability**

- One Size Fits Many Each sealing module fits a range of cable and pipe diameters. In fact only 6 module sizes are required for the diameter range of 3mm–99mm, meaning less SKUs, simpler ordering, and a perfect fit every time
- **EMC Sealing** Protection of cable and pipe penetrations for EMI and EMP. This is crucial for C4ISR applications
- **Design Assistance** We simplify your design work with the following resources and tools available:
  - Roxtec Transit Designer™, our free, web-based application for designers
  - Engineering Support and Customised design. We can create a tailor-made solution for your needs
  - CAD/BIM drawings and models are available.

#### **Discriminators**

- Multidiameter™ Technology by Roxtec Our invention for adaptability is
  a solution based on rubber modules with removable layers. It allows for a
  perfect seal, regardless of the outside dimension of the cable or pipe
- Certified safety seals Our seals protect life and assets against risks
  caused by, for example, fire, gas, water, dust, pests and blast load. The
  system is tested and approved by all major classification societies and used
  in a wide range of applications, giving Roxtec the widest range of approvals
  of all cable and pipe transit systems.

#### **Current and future developments**

- Continue to partner with Defence Primes on land and sea projects
- Support the ongoing sustainment of existing platforms through local technical support and inventory
- Leverage our global business to support international projects
- Showcase our latest innovations that meet and exceed current standards.

#### STELLA ENGINEERING

#### **Mission**

To master complex challenges. To produce at an elite level in terms of quality, speed and attention to detail.

#### Company summary

Stella Engineering Pty Limited (Stella) is a privately owned engineering company located on the NSW Central Coast. Founded in 2006 by the current owner Michael Woodcock.

Stella is a pre-eminent leader in design and manufacture of precision machined components and assemblies servicing high profile clients across Australia.

The Stella team draws over 30 years of experience from automotive manufacturing, advanced mining technologies, and power generation. For several years these disciplines and knowledge are now applied to the development and manufacture of critical components for defence weapons systems, marine navigation, and anti-drone devices.

Stella operates an ISO 9001, state of the art CNC manufacturing facility, chemical conversion coatings, and its own APAS certified painting facility. We also have a dedicated assembly and electromechanical testing facilities to accommodate special requirements and complete our offering of turn-key products and sub-systems. Stella has engaged SAI Global for certification to AS 9100D in 2023.

#### Objective of participation at Land Forces

Connect with Prime manufacturers of Land vehicles for supply of mechanical assemblies.

#### Key capabilities

- 30 years of experience in product development, testing, and manufacture of complex mechanisms
- Finite Element Analysis of components and assemblies
- 3, 4, and 5 Axis CNC machining of aerospace materials
- Chemical conversion coating of light alloys
- APAS certified painting facilities
- Electromechanical testing of assemblies.

#### Current and future developments

- Heavy vehicle 4WD axle assembly
- Heavy vehicle hydraulic braking system Up to B7 class armoured vehicles
- · Light weapon mounting systems.



## Michael Woodcock Managing Director

+61 438 059 301 michael@ stellaengineering.com.au stellaengineering.com.au

#### SYSTECON

#### **Mission**

Provide world leading software and services to help predict and assess the impact of decisions on performance and cost, during the system's entire life cycle.

#### Company summary

For over 40 years, Systecon has helped decision-makers and suppliers to defence projects in areas such as resource dimensioning, ILS/LCC and Life Cycle Management.

Their proprietary software 'Opus Suite' is the leading toolset for providing analysis and decision support to find the balance between performance and life cycle cost.

OPUS Suite consists of:

- SIMLOX: the ideal tool for analysis and simulation of operations, maintenance concepts and spare equipment needs
- OPUS10: a world leading tool for optimising spare parts and logistics solutions
- CATLOC: a powerful tool for calculating and analysing Life Cycle Cost (LCC).

#### Objective of participation at Land Forces

To improve brand and product awareness within the Land Domain as the OPUS Suite is ADF's approved analytical tool suite.

#### **Key capabilities**

Systecon is a leading provider of consulting services and decision support software tools for systems Life Cycle Management and Integrated Logistics Support. Helping customers establish solutions that enable higher productivity, better operational availability and higher safety in the most cost-effective way from a life cycle perspective. Systecon's software Opus Suite is the choice of hundreds of defence companies worldwide when it comes to analysis support of large and technically complex war-fighting systems.

#### **Current and future developments**

- Direct connection to ERP/Supply Chain databases for a tactical outlook on expected system availability and mission readiness
- Direct import capability from LSAR/Configuration Management Databases thus reducing manual data loading
- Tactical and Strategic Dashboards to visualise system/s preparedness and readiness
- Machine Learning Analytical capabilities
- S3000L compatibility.



# Andrew Perkins Country Manager Australia

+61 476 828 148 andrew.perkins@ systecon.com.au systecongroup.com/au

#### **VICOM AUSTRALIA**

#### Mission

Leading provider of test, measurement, monitoring and communications infrastructure solutions in Australia and New Zealand. Through its service and support organisation, Vicom provides a unified solution for the Australian Government.

#### **Company summary**

Since their inception in 1975, Vicom has forged strong long-term relationships with principal suppliers who rank amongst the world's finest. An enviable product portfolio, strong service support facilities and extensive expertise in telecommunications, RF and general electronics test technologies, enables Vicom to provide world-class test and measurement solutions and customer support.

Vicom is committed to increasing its direct commercial engagement with local suppliers which are tailored to support unique local requirements, such as support to Commonwealth Procurement Rules and more efficient engagement of Australian business entities.

With a strong focus towards export of its repair, calibration, training and support services, Vicom Australia is continuously seeking opportunities through either funding or partnership with other SME's or Defence prime's to grow its capability to participate in global export.

#### Objective of participation at Land Forces

Vicom Australia's key value is to create opportunities by partnering with local industries to provide the Australian Defence Force with leading edge technology and provide the Commonwealth of Australia with sovereign capability.



#### **Shaneel Kumar**

+61 437 955 822 info@vicom.com.au sales@vicom.com.au vicom.com.au

#### Key capabilities

Our Test and Measurement Specialities include:

- RF Analysers
- RF Power and Frequency Measurement
- Signal Generators
- Radio Test Sets
- Oscilloscopes and Probes
- Optical Fibre splicers and testers
- Spectrum Monitoring and Geolocation
- Transport, Datacom and Ethernet testers
- Meters and Data Acquisition Systems
- Networks Test and Monitoring
- Power Supplies and Electronic Loads
- · Position, Navigation and Timing
- GNSS Simulation
- Semiconductor Test Systems
- Audio Test
- Probing stations
- Service assurance systems and automated test systems.

#### Current and future developments

With a strong focus towards export of its repair, calibration, training and support services, Vicom Australia is continuously seeking opportunities through either funding or partnership with other SMEs or Defence primes to grow its capability to participate in global export. Defence programs and projects will allow Vicom Australia to develop its solutions and services for Australia and for export, which will bring Australia a new and sovereign capability, thus creating new opportunities for Australians.

Vicom Australia is committed to the creation of new positions for technicians, engineers, project manager, program managers and highly skilled, full time, locally employed Australian staff at its facilities in Bella Vista, NSW and Oakleigh South, VIC. The service and support teams at both facilities provide repair, calibration, technical support and training services. The Oakleigh South calibration laboratory has been NATA accredited since 1987. These teams work closely with overseas suppliers to transfer ongoing knowledge and skills into Australia to provide a sovereign capability environment for the CoA.



52 Martin Place Sydney NSW 2000

GPO Box 5341 Sydney NSW 2001



investment.nsw.gov.au/contact-us

0000000000

investment.nsw.gov.au

© State of NSW 2022





00000000