WHAT IS DINAMIC?

The DINAMIC Innovation Program is a powerful launchpad for Defence Trailblazer's mission to accelerate Australia's innovation agenda by supporting early-stage companies and collaborative R&D. Delivered in partnership with University of Adelaide's ThincLab and UNSW Founders, this 18-month program provides upskilling, expert mentoring, access to prototyping infrastructure via the Proto-Lab Network, funding through the Seed Innovation Fund, and connections to defence-ready investors. Focused on TRL 1–5 technologies that will support the Australian Defence Force to achieve asymmetric advantage, DINAMIC empowers innovators to develop deployable prototypes and pursue dual-use and international market opportunities.

VENTURE PROFILES

Advanced Alloy Holdings' flagship Bright Brass™ is an outstanding new material with customers within defence for use in next-generation sovereign ammunition. This dual use material also has application within the plumbing industry for lead-free tapware and fittings, and in the engineering/transport sectors for self-lubricating bearings and gears.
Brass for High-Performance Ammunition Casings: AAH Bright Brass™ cased munitions are lighter weight and being produced for trial by the Australian Defense Force in partnership with Thales Australia. Early tests have shown increased range and energy at target when compared with cartridge brass-cased bullets. advancedalloyholdings.com

ACDC is a private research and development company, born through the innovative mind of Thomas Baldacchino. Thomas combined his materials science expertise and leveraged it utilising AI to create a lightweight semi solid state nickel iron battery with a cycle life exceeding that of lithium ion.
Through their collaboration with Starknex, ACDC leverages their extensive experience and cybersecurity proficiency to foster innovative ideas and establish a high level of security. acdcorp.com.au

For more information contact **Heather Nicoll, General Manager, Workforce, Innovation and Culture**
Email: heather.nicoll@unsw.edu.au for a confidential discussion

Advent Atum

Advent Atum's HORAS TDE is a scalable, autonomous fire control system offering AEGIS-class capabilities for any weapons platform, including Remote Weapon Stations (RWS), Anti-Aircraft Guns, Missile systems, and Indirect Fire platforms. It autonomously detects, tracks passively ranges, and engages threats in real-time, combining AI with precision targeting and cooperative engagement capability.
HORAS TDE fuses data from multiple sensors, delivering superior situational awareness and fast response to threats. Its modular design ensures integration with various platforms with current deployment converting RWS and AA guns into effective counter-drone systems. HORAS TDE empowers forces with a multi-domain solution to dominate the modern battlefield. adventatum.com

AQUILA

Aquila enables drones to fly indefinitely using safe, efficient optical power beaming technology. By replacing short-lived batteries with continuous, long-range optical energy, we solve the critical endurance bottleneck for defence, border security, and industrial drone operations.
Today's Lightway Sentry product is just the beginning. Our broader vision is to build the world's first optical energy network, wirelessly distributing power at scale to transform global infrastructure, provide universal energy access, and secure critical services anywhere on the planet. aquila.earth

AUSCO GROUP

With over 70 years of experience in marine hardware and engineering, Ausco is now expanding into advanced maritime systems. Their latest innovation, GannetDive LRX, is a mobile, modular launch and recovery solution designed to support the safe and efficient deployment of autonomous and remotely operated platforms. Scalable and adaptable, this technology has applications across defence and commercial sectors, enabling reliable operations in challenging marine environments. auscogroup.com.au

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Australian Droid + Robot (ADR) deliver world leading field hard & field proven dual-use sovereign robotics that are high appeal to the heavy industries such as mining, defence, & security.
The economics of many vital common tasks no longer stack up, often a solution simply can't be found & they relegated to the 'wish list' for many big companies.
ADR'S proven robotics with advanced software for control, data harvesting, mission modes, & insight generation directly enable massive step changes in the Safety – Productivity – Efficiency of a range of current heavy industries jobs.
ADR is currently engaged with the Australian Defence Force exploring the opportunities and applications of remote collection. australiandroid.com.au

Aurora Materials is a pioneering company at the forefront of advanced materials science, dedicated to enhancing and securing supply chains through innovative solutions.
Aurora Materials specializes in the development of modular emissive materials with tunable fluorescence properties. Our materials can be tailor made to your specification, offering a large window of excitation and emission wavelengths, including the visible, UV and near-infrared (NIR) spectrum. This technology provides unparalleled security and traceability, designed to meet the rigorous demands of modern defence and security applications. By leveraging our cutting-edge materials, we aim to bolster the Australian defence industrial base with a sovereign capability that ensures operational readiness and strategic resilience.
At Aurora Materials, we are committed to driving innovation and excellence, contributing to a safer and more efficient supply ecosystem.
auroramaterials.com.au

Bastogne Systems has developed FOG SAFE, an ultrarapid fog concealment technology designed to counter the escalating threat of unmanned systems, precision weapons, and advanced sensor platforms across land, maritime, and civilian domains.
operations@bastognesystems.com

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Breaker

An AI Agent for every mission. Breaker's Agent is an autonomy software stack that enables a single operator to manage multiple autonomous systems using two-way natural language and the radios they already carry. The system makes intelligent decisions by analyzing mission context and coordinates effectively with other robotic assets to form a cohesive team. Breaker's Agent is currently deployed onto platforms for customer delivery. Breaker works closely with international Defence groups to deliver Breaker's Agent onto ISR platforms. Breaker is ready to demonstrate capability to operators and integrators.
breakerindustries.com

CARROT AERO
INNOVATIONS

Carrot Aero Innovations is an Australian technology company on a mission to deliver asymmetric advantages through advanced uncrewed aviation systems. We develop novel, cost-effective solutions that give Australian and partner forces a decisive edge, ensuring they can overmatch future threats. Our flagship product, the Lapwing Tactical Missile System, is a cost-effective, container-launched solution that delivers extended range and precision fires. By leveraging modern, mass-produced electronics and a novel computer vision-based navigation system, we are placing leading-edge, asymmetric capabilities in the hands of the warfighter, ensuring they can meet and overmatch emerging threats.
Lapwing is cheaper, faster, goes further and hits harder. carrotaero.com

CLEANSUBSEA

CleanSubsea is a Western Australian based company that owns all licenses and patents associated with a revolutionary new fully enclosed complete capture, containment and filtration In-Water Hull Cleaning technology called the Envirocart™ System. An Innovative Blade Based Underwater Hull Cleaning System.
Our mission is to re-introduce environmentally secure and responsible In-Water Hull Cleaning to the world's ports. Our commitment is to contribute to global efforts to combat climate change and protect Marine Biodiversity.
We share your passion for the world's ocean, new research, technologies and award-winning enviro-friendly solutions. cleansubsea.com.au

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Crest Robotics is de-risking naval asset maintenance, to help labourers and managers deliver asset care programs with enhanced safety and productivity, increasing longevity, cost-effectiveness, and preparedness of the fleet with dynamic tool-wielding robots. crestrobotics.co

DefenSight: an AI-guided microscopy for biosecurity and CBRN preparedness

DefenSight is an emerging AI-guided, microscopy-integrated platform designed to strengthen national biosecurity and defence readiness by providing high-resolution insights into potential biological threats. Built for compatibility with modern microscopy systems, DefenSight combines machine learning, digital pathology principles, and automated analytics to support the early-stage pathogen screening across research and applied contexts. defensight.com.au

Dragonfly Thinking is developing techniques and AI-powered tools to help decision makers and analysts make better decisions in complex situations with the help of a structured analytics framework. dragonflythinking.com

ecoJet strives to provide solutions tailored to each challenge. Our Research & Development program continues to innovate leading capabilities to solve a range of current and emerging problems. By employing an agile approach to solution development ecoJet is able to respond dynamically to emerging challenges, incorporating leading technology beyond Micro Turbine Engines (MTEs) to achieve a tailored solution. ecojetengineering.com.au

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ECO SPECTRAL

Ecospectral builds AI backed products and services that give unprecedented understanding of the built space measuring occupant and building properties to provide deep understanding of typical behaviours, fast detection of abnormal behaviours (in occupants and structure) with realtime feeds and AI based analysis and detection. The knowledge gained using award winning BRIM sensors and systems provides critical data to building owners, occupants, emergency services and first responders in understanding how the space is used, tracking and catching abnormal behaviours and events, and analysing and supporting responders in real-time with valuable visual and data feeds. ecospectral.com

ELECTRO BASE
SUPERCHARGE ANYTHING ANYWHERE

Electro Base is a Western Australian renewable energy company with a secure, Australian-engineered Energy Management System. We provide grid-independent battery storage and e-mobility charging solutions powered by renewable energy.
Our Comprehensive Services Include:

- Energy Management Systems (EMS)
- Renewable Energy Storage and E-Mobility Charging
- Consulting and Operations

electrobase.au

EpiCentre.dev

EpiCentre.dev is developing decision support for cyber attack management to help decision makers in organisations and government understand the situation and identify and respond to possible cyber-attacks through transforming network data into a probabilistic map of status and intent. epicentre.dev

EXTAG
CUSTOM ASSET MANAGEMENT

Based in Perth, Western Australia, EXTAG has developed a software platform that helps asset intensive organisations ensure their assets are compliant, safe and ready to use.
Proven in the Mining and Oil & Gas sectors for the last 6 years, EXTAG's proprietary flexible platform enables rapid deployment and delivers customised value and outcomes for tactical, operational and strategic levels.
extag.com.au

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Fortifyedge provides Zero Trust identity and access solutions for the tactical edge utilising TinyMLOps. Specialising in Machine learning and AI for OEMs. Currently focusing on cyber/physical security. Fortifyedge's mission is to solve the most complicated problems. Using state of the art approaches like edge computing and machine learning even when disconnected. So you can make trusted decisions at the speed of relevance.
We solve the problem of 'Are you whom you say you are' seamlessly and continuously for highly mobile operators that can't be distracted by using smart cards, USB keys and passwords to access systems. Operators such as Public Safety professionals in PPE and warfighters in extreme conditions need strong authentication and access where traditional solutions are too cumbersome and put them at risk.
fortifyedge.com

Frontier Materials Technologies is leading the way through our core product
KinetiShield. KinetiShield represents a breakthrough Sovereign Hydrogel Tamper Material. It is a unique blend of safe grade material with superior tampering characteristics.

KinetiShield is at the forefront of our R&I efforts with the aim to upscale production. At Murdoch University, we are committed to engineering a robust innovative sovereign product. g.poinern@murdoch.edu.au

Ghost Fire Systems specialises in designing electronic battlefield simulators to optimise tactical training. Combining our 40 years of experience in the Australian Army as users & trainers and our expertise in electronics and engineering, we've created electronic battlefield simulator systems.

Our systems are plug and play, have no safety requirements, expend no by-products and have unlimited cycles, allowing operators to train any time, in any environment and run unlimited scenarios, to increase their lethality at the team level.
ghostfiresystems.com

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GLIA Diagnostics is developing a point of care (POC) device, to help defence medical staff/operators define traumatic brain injury (TBI), within 20 minutes using a novel detection technology, incorporating proprietary blood based biomarkers. gliadiagnostics.com

Halcyon Technologies is developing a maritime drone system with launch and recovery technology for the Navy, Army (amphibious forces), and the Australian Border Force. Our team, with extensive experience in large-scale autonomous systems, offers a low-cost, semi-attritable aerial surveillance solution integrated with other platforms via remote links, providing a significant capability edge and Warfighting advantage. halcyontechnologies.com.au

Hullbot is an innovative dual purpose defence and civilian subsurface capability, that offers a pragmatic solution for the cleaning of military vessels. This unmanned robotic cleaning system is engineered to automate hull maintenance, thereby reducing the need for manual labor and dangerous diving operations. Its implementation leads to increased efficiency in resource utilisation and maintenance processes.
Designed for military use, Hullbot provides a reliable, time-saving, and safety-enhancing tool, aligning with the operational demands and precision requirements of naval forces. This technology represents a significant step forward in optimizing vessel maintenance in various military contexts. hullbot.com

IIK Materials is developing nanocomposite anechoic tiles for defense ships and submarines to reduce enemy detection at depths over 300m. Unlike rubber, these tiles withstand high pressure and are cheaper to manufacture, proving effective in laboratory tests. unsw.edu.au/staff/imrana-kabir

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Jackal Industries have created the MIRAGE System. It's a low-cost, multi-role Electronic Warfare (EW) payload you can reconfigure in minutes. Whether you need to create a ghost decoy to deceive the enemy, jam their communication links, or gather intel, MIRAGE is capable of integrating with UAS, UGV, or manned systems already in use.
Their practical training courses, are designed to help end users understand modern threats, own signatures across the spectrum, use modern masking techniques to stay hidden, and leverage deception to dominate the battlefield. jackal-industries.com

KINEM Robotics is developing a low-cost Optionally Crewed Remote Placement Platform (OCRPP) to help ADF and allies operate in hostile environments. Integrating weapons handlers, machine vision, communications, and AI, this deployable platform performs defense, surveillance, and support tasks, enhancing tactical and operational capabilities in semi-autonomous warfare. kinemrobotics.com

Multiforge, an Australian company, designs and manufactures physical training aids to help emergency responders improve their limited tactical positioning training resources by producing customer tailored and specific, modular, scale training aids that are intuitive to use and increases training engagement, efficiency and effectiveness.
Multiforge has developed physical training aids to help aviation emergency responders improve their limited tactical positioning training resources by producing specific, modular, training aids (built to scale) that are intuitive to use and increase training engagement, efficiency and effectiveness.
multiforge.com.au

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NanoCube is developing an advanced body armour designed to provide full-body ballistic protection while addressing common issues such as breathability, temperature control, comfort, and mobility. The technology features infrared signature reduction to reduce detectability and traceability using thermal imaging devices.
The technology is designed to protect personnel against potentially fatal or non-fatal injuries, and can also be used as a laminate layer on aircraft, vehicles, marine craft and deployed infrastructure to protect against damage in combat. nanocube.health

Empowering Safe Diving Experiences.
NAUTIC Technologies is dedicated to developing cutting-edge safety devices for the maritime industry, with a focus on enhancing safety protocols for professional, recreational, and defence members. Our innovative devices are designed to keep users safe operationally, offering peace of mind in various underwater environments. nautictechnologies.com.au

Panop is an Australian defence technology fi rm specialising in advanced electromagnetic systems for defence and national security. We design and deliver technologies that give military forces the ability to detect, interpret, and control activity in the electromagnetic spectrum—enabling faster, more informed decisions in complex operational environments. Our core expertise spans electronic warfare, radio frequency and microwave engineering, signal processing, and autonomous systems. We develop tools that provide real-time situational awareness of invisible signals—such as radar, communications, and electronic emissions—and empower operators to act with precision and control. panop.ai

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PRAETORIAN AERONAUTICS

Praetorian Aeronautics is an Australian defence company focused on developing advanced unmanned aircraft systems (UAS) and counter-UAS solutions tailored to meet the specific needs of the Australian Defence Force (ADF) and allied nations. Aligned with the 2023 Defence Strategic Review and US DoD guidelines for attritable and expendable UAS, Praetorian leverages a sovereign Australian supply chain, collaborating with domestic start-ups and SMEs. The company will export its cutting-edge technology to NATO, Quad, Five Eyes, and Indo-Pacific partners, strengthening global defence capabilities while addressing emerging threats from recent global conflicts. praetorian-aeronautics.com

PROGRADE ENGINEERING

Prograde Engineering provides practical, high-quality mechanical design, analysis and certification solutions for a range of industries.
In addition to our core engineering work, we also develop custom digital training and simulation tools. One such capability is HUD Sim, an iPad-based app that replicates the heads up display and primary flight display of the Pilatus PC-21 aircraft. Designed to support pilot training and briefing effectiveness, it is currently in use within ADF pilot training schools and highlights our ability to combine engineering know-how with modern, purpose built app development. Whether delivering mechanical designs or custom software tools, our focus remains on practical, reliable outcomes that meet the operational demands of our clients. prograde engineering.com.au

QUANTUM LOCK

Quantum Lock protects mission critical infrastructure using the power of Quantum Mechanics. Remote hardware in power plants, telecommunications platforms, and data center infrastructure has all been a target of advanced persistent threats. Quantum Lock can protect these critical assets by providing physics based security guarantees that the device has not been hacked. quantumlock.com.au

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REDACTED

Redacted Information Security is a local Canberra based cyber and information security consultancy and offensive capability development company established in January 2022. With combined experience across Australia's government, private sector, law enforcement, military, and intelligence agencies, we are uniquely positioned to provide expert advice to your organisation.
NeonRiot, by Redacted, is a red team software platform for cybersecurity red team activities, adversary simulation, training and exercising. With features for operational planning, team collaboration, skills development, command and control, exploitation, and more NeonRiot significantly lowers the barrier of entry to quality red team operations.
redacted.au

RedTail Technology

Redtail Technology produces the Katoomba sDEW, a small directed energy platform that provides counter-small uncrewed aerial system capability to dismounted warfighters and law enforcement. The Katoomba allows the user to choose to dazzle, blind or defeat small drone, protecting lives and assets. Dazzle and blind settings enable users to minimise the risk of collateral damage in populated areas. AI aim-assist helps fatigued soldiers under high cognitive load to precisely engage and neutralise threats. The Katoomba offers rapid training, low cost, interchangeable energy magazines, and can be used as a rifle attachment, a standalone system, or mounted to a turret. redtailtech.ai

RESDEMOU

Today, organisations and government agencies put all their documents in one big digital vault, and they secure that, meaning when an attacker fi nds one oversight and gets in, they get everything in one fell swoop. With Resdemou, everything from documents to real-time drone feeds is independently secured in its own digital "micro-vault", so even if an attacker gets into the main vault, they'd still have to break into every document individually, turning a network breach from catastrophic data loss into a contained and detectable incident. resdemou.com

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At Rocket Fast Drones, our mission is to unlock the potential of the skies. We believe that drone technology can revolutionize industries and empower creators. Headquartered in Brisbane, Australia, we are at the forefront of developing innovative, fast, and intuitive drones that make aerial technology accessible to everyone. From streamlining logistics to capturing geospatial data, our goal is to provide the tools that power the future of flight. Join us on our journey at rocketfastdrones.com

SABRN is an Australian-veteran-owned multifaceted, innovative, and purpose-driven Group of Companies. SABRN was founded in South Australia, and has footprints in Adelaide (SA), Perth (WA), Brisbane (QLD), Canberra (ACT), and Bredbo (NSW – testing and training facility).
SABRN aims to provide maximal benefit to our planet and its inhabitants.
SABRN prioritises the health and wellbeing of individuals, communities and the planet, and aims to make effective healthcare for people available and affordable. sabrntech.com

Saqqara Aerospace is dedicated to providing innovative aerospace solutions. Our portfolio includes advanced sensing technologies, uncrewed aerial systems, bespoke solutions, and turnkey consulting services—all built around precision and innovation. Headquartered in Australia, our mission is to combine advanced technology with practical applications to provide accurate and reliable data for various industries.
Our team of world-leading experts bring a wealth of experience, creativity, and passion for innovation. At Saqqara Aerospace, we believe in pushing the boundaries of what's possible and working collaboratively with our clients to achieve extraordinary outcomes.
saqqaero.com

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SEITEC

Seitec specializes in advanced passive seismic systems for military and intelligence applications, enhancing operational efficiency and safety. UXOTrackS (Unexploded Ordnance Tracking System) can eliminate the risk of lost UXO on weapons ranges by using seismic sensors to detect, localize, and classify ordnance impacts across vast areas. Additionally, Nightingale repurposes the same hardware for footstep detection and tracking, providing real-time surveillance and incursion alerts. Seitec's solutions enable smarter, safer operations across a wide range of military environments. seitec.com.au

Sentri

Sentri is a smart animal health monitor designed to enable animals to live healthier, happier and longer lives. It performs all the functions of a standard animal 'identity microchip' plus so much more. Through revolutionary biosensor technology, Sentri sets a new standard for animal healthcare by providing the earliest opportunity for intervention and effective treatment for better health outcomes. sentri.com.au

solalinx

Solalinx, founded by Martin Hamilton, is an Australian deep-tech innovator delivering the LightEnhancer HLCS overlay. Integrating spectral-shifting nano-coated films, passive radiative-cooling layers and advanced concentrator optics, this sovereign snap-on retrofit boosts panel output by 25–30 %, cuts module temperature by up to 8 °C, and extends lifespan across defence and commercial rooftops.
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Stratoship

Bringing the stratosphere within reach. Stratospheric observation technology can monitor natural disasters, changing environments, oil spills, deforestation, and more by providing an affordable satellite-like platform that can stay over the study area and provide a near real-time view. For Defence and Security Strotship's high altitude platforms can extend the range of radio networks and communications and reduce the need for ground-based stations. With the stratoship's ability to move and hold station, the ship acts as a dynamic remote platform, ready for any situation. stratoship.au

TAIPAN TECHNOLOGIES

Taipan Technologies Pty Ltd is advancing E-IDWR, a method that embeds density-matched inert inserts into existing Australian munitions to slash energetic fill yet preserve—or lift—lethality. We are pairing AI-driven hydrocode design with additive-manufactured inserts, moving through lab validation toward integration trials with local GWEO producers. The goal: expand output from current production lines, cut logistics mass, and deliver a rapid, sovereign performance upgrade for the ADF. taipan-technologies.com

undatech

UndaTech is developing innovative undergarments to enhance safety, comfort, and performance for the Australian Defence Force, emergency services, and high-risk workers. These fire-safe garments integrate seamlessly with existing uniforms and equipment, offering protection while ensuring optimal comfort, mobility, and breathability. By addressing the unique challenges women face on the frontlines, such as menstruation management and adequate breast support, UndaTech's products reduce discomfort during extended periods of wearing heavy gear and performing under pressure. This enables women to focus on their missions, contributing directly to improved performance and survivability in dynamic, high-risk environments. undatech.com.au

Uplift
Autonomous Air Logistics

Uplift Aero is disrupting logistics with the world's first autonomous zero emissions air logistics drone port. We are opening the skies for business to unlock opportunity anywhere, anytime. uplift.ing

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