



Joint Statement of Strategic Intent and Cooperation

between

Australian Space Agency

and

XTEK Ltd







STATEMENT OF STRATEGIC INTENT AND COOPERATION WITH THE AUSTRALIAN SPACE AGENCY

The Commonwealth of Australia as represented by the Australian Space Agency, part of the Department of Industry, Innovation and Science, hereafter referred to as the "**the Agency**", and represented by Dr Megan Clark AC, Head, Australian Space Agency;

and

XTEK Ltd, hereinafter referred to as "**XTEK**" and represented by Mr Philippe Odouard, Managing Director, XTEK;

Recalling that the Australian Civil Space Strategy 2019-2028 is a framework for the development and growth of the Australian space industry over ten years, underpinned by four strategic pillars: International; National; Responsible; and Inspire. Under these pillars the strategy endeavours to help realise opportunities and address challenges by opening doors internationally; increasing national space capability; promoting responsible regulation, risk and space culture; and building the future workforce. The Strategy sets a path for the Agency to triple the size of Australia's space sector to \$12 billion and create another 20,000 jobs by 2030;

Recalling that the Agency's purpose is to transform and grow a globally respected Australian space industry that lifts the broader economy, inspires and improves the lives of Australians – underpinned by strong international and national engagement;

Recalling that the Agency has seven National Civil Space Priority Areas including communications technologies and services; position, navigation and timing infrastructure; space situational awareness and debris monitoring; leapfrog research and development; Earth observation services; robotics and automation on Earth and in space; and access to space;

Recalling that the Agency's responsibilities include: whole-of-government coordination of Australia's civil space sector matters, providing primary civil space policy and strategic advice to the Australian Government, supporting the growth of our national space industry and the use of space across the broader economy, leading international civil space engagement, administering space activities legislation and completing our international obligations, and inspiring both the Australian community and the next generation of space entrepreneurs;

Recalling that XTEK is an Australian company specialising in the development of composite material products and supplying integrated solutions to Space, Defence and Government customers;

Recalling that XTEK has a suite of unique and patented technologies, including the XTclave™ that offer unique solutions for space applications. These include ultra-high processing pressure for increased ballistic properties, reduced outgassing of plastics for lower cost material options, higher fibre volume fractions for increased strength to weight ratios and benefits in ablative applications;

Recalling that XTEK's strategy is to develop a sovereign space capability including design, manufacturing and testing of lightweight space products, to supply advanced material and process components, assemblies and subsystems for space systems;

Recalling that XTEK's strategy is to develop a range of specialised products using advanced materials (lightweight composite materials and ceramics) and state of the art processing technologies, including XTEK's patented XTclave™, for the Space and Defence industries.

Recalling XTEK's depth of specialist design, materials and process engineering knowledge, development and prototyping facilities (including prototyping labs in Adelaide and manufacturing

facilities at a place to be decided in Australia) and ISO 9001-2015 certification, uniquely equips XTEK to provide specialised components, assemblies and systems along with the necessary testing and engineering support to the Australia's space sector in the strategic areas of space hardware design and development, operations and support;

Acknowledging that the Agency and XTEK share the objective of establishing and enhancing the capability and competitiveness of Australia's space industry and promoting development and growth in the sector by providing the necessary environment that a space industry "eco-system" relies on. This will support smart growth, innovation and technology development and support growth in high skilled, high qualified jobs in Australia, for Australia's interests in space;

Acknowledging that the Agency as an Australian government agency is committed to open, transparent and significant industry engagement;

Acknowledging that XTEK has a proven history of delivering specialised hardware and software for Government and Defence customers as a prime contractor, distributor, reseller, and original equipment manufacturer. XTEK will leverage its experience in research, engineering, prototyping, testing, and production to deliver new composite material space products, enhancing those companies and Governments working in space with state of the art equipment, for example satellite structures, launcher systems and launcher subsystems, in support of the Australian Civil Space Strategy.

Through this Statement, XTEK acknowledges the following current projects, areas of strategic interest and growth, potential new areas of collaboration, and support for education and training which are of interest to the nation.

1. Growing space jobs, skills and expertise

Over the next three to five years XTEK will employ over 45 new jobs for engineers, technicians and machinists to build out its development and manufacturing capability for space products. With this multi-disciplinary team, XTEK can conceive, design, prototype, test and manufacture entirely inhouse composite material integrated products for rapid entry into service. Composite materials are the material of choice for satellite systems and components for their lightweight and adaptable properties.

2. Development of new space products

XTEK has developed, and continues to grow, its design and test capabilities in Australia. XTEK is developing new satellite structures, launcher platform hardware and deployment systems which strongly leverages the in-house simulation and calculation systems to virtually validate and model for the complex load cases and requirements of launch and the harsh environment of space.

XTEK also has patented process and materials technologies that are protected in most global space markets. This means XTEK brings new and unique technical advantages to the space sector.

To further this work, XTEK has entered into a Memorandum of Understanding with Skykraft Pty Ltd to utilise our lightweight composites technologies to design and manufacture small space craft and launcher systems.

3. Investment in space design, manufacturing facilities

XTEK is building a factory of the future that will establish a sovereign capability in advanced manufacturing and treatment for the production of space components and systems. This investment is approximately \$5M AUD for specialised manufacturing equipment and production line hardware, including robotic automation for producing commercial products.

4. R&D and participation in space research science platforms

XTEK has, and continues to research and develop, new technologies in materials science, engineering, manufacturing processes and simulation, and modelling. Annually, XTEK spends over \$1M AUD in R&D across the business. XTEK is actively engaged with the research community and wishes to extend its involvement as an industry partner to initiatives and programs such as Cooperative Research Centres, future institutes and space research science platforms.

5. Building the future workforce

XTEK future position in the space industry relies on the expertise and training of its people. XTEK has employed over 10 in-house graduate engineers, trade apprentices or trainees in recent years. XTEK will continue to grow its future space design, manufacturing, maintenance and field support workforce through apprenticeships, internships and student programs.

This Statement constitutes the expression of both parties' intention to continue discussions. This statement does not create legal obligations between the parties and does not establish the obligation to enter into a certain agreement.

This Statement is signed in two (2) copies at the offices of XTEK, Canberra on the 18 July 2019.

On behalf of The Australian Space Agency

On behalf of XTEK Ltd

Dr Megan Clark AC Head, Australian Space Agency Mr Philippe Odouard

Managing Director, XTEK Ltd