

ORBIT BOY TO BEGIN DEFENCE ROCKET MANUFACTURING SiNTL™ SELECTED AS PRIMARY ENERGY STORAGE CANDIDATE

Orbit Boy’s planned defence production commencement in the short term and U.S. capital markets listing extends the SiNTL testing programme into defence launch vehicles and creates a value-realisation pathway for 14D’s equity investment in Orbit Express

KEY HIGHLIGHTS

<p>ORBIT BOY TO COMMENCE DEFENCE ROCKET & DEFENCE LAUNCH VEHICLE MANUFACTURING</p>	<p>Orbit Boy has advised 14D that it is planning to manufacture launch vehicles for defence customers in tandem with a planned U.S. capital markets listing. It has previously advised 14D that its Orbit Boy Launcher is a reusable air-launch system built on heritage technology tested across approximately 500 launches.</p>
<p>WHAT ARE DEFENCE LAUNCH VEHICLES?</p>	<p>Defence launch vehicles are orbital rockets used to place military, intelligence, navigation, communications, or early-warning satellites into space. Many of these launch vehicles are also used for civilian or scientific missions, making them dual-use systems.</p>
<p>SiNTL SELECTED AS PRIMARY ENERGY STORAGE CANDIDATE FOR DEFENCE VEHICLES</p>	<p>Orbit Boy has selected SiNTL silicon-anode batteries as its primary energy storage candidate for its defence launch vehicles and ARCap module ahead of the production commencement. SiNTL offers at least 30% greater energy density than graphite-anode alternatives and is compatible with existing battery manufacturing processes.</p>
<p>14D EQUITY POSITION IN ORBIT BOY; NASDAQ / NYSE DISCUSSIONS PROGRESSING</p>	<p>Under the agreement announced on 17 June 2026, 14D subscribed for equity in Orbit Express Pty Ltd. Orbit Boy’s planned U.S. listing creates a potential value-realisation pathway for that holding, joining other U.S. listed space companies including SpaceX, Intuitive Machines, Rocket Lab Corp, Planet Labs and Redwire Corp.</p>
<p>DEFENCE MANUFACTURING EXTENDS SiNTL COMMERCIAL SCOPE</p>	<p>The original agreement with 14D covered satellite power systems and commercial launch applications. Orbit Boy’s defence manufacturing programme adds a further revenue pathway: supply of SiNTL-based batteries into production defence launch vehicles, with volume tied to launch contracts. The parties are in discussions to extend the existing agreement to cover these applications.</p>
<p>EXISTING TESTING PROGRAMME CONTINUES</p>	<p>The six-stage milestone testing programme announced on 17 June 2026 is unchanged. SiNTL sample and cell validation is the first stage, with the Solaris Space Defence Laser battery assessment as the contingent final stage. Results from each stage must pass before the next begins.</p>

1414 Degrees Ltd (ASX: 14D) (“1414 Degrees” or the “Company”) is pleased to advise that its space partner Orbit Boy has announced plans to begin manufacturing launch vehicles for defence customers in the near term, in tandem with a planned U.S. capital markets listing, and has selected

SiNTL™ silicon-anode battery technology as the primary energy storage candidate for those vehicles. This represents a significant step along 14D's pathway to validation of its SiNTL technology.

The development builds on the testing and commercialisation agreement announced on 17 June 2026, under which Orbit Boy is testing SiNTL for use in satellite power systems and, subject to performance outcomes, the Solaris Space Defence Laser.

ORBIT BOY — DEFENCE MANUFACTURING PROGRAMME

Orbit Boy has advised that it plans to begin production of its Launcher system in the near term. The Orbit Boy Launcher is a reusable, air-launched rocket that can place payloads into any orbit on 24 hours' notice. It launches from a cargo aircraft (eg, C-17 or A400M) and can be deployed from any international airport, without fixed ground infrastructure.

The launcher is built on heritage rocket technology developed with the exclusive cooperation of Yuzmash, one of the world's leading launch vehicle manufacturers. Orbit Boy was co-founded by three former Chairmen of the State Space Agency of Ukraine, who together oversaw more than 150 successful launches over three decades.



Orbit Boy Launcher

Reusable, On-demand, Air Launch System for satellites

ARCap Module

Autonomous rendezvous, maintenance, repair and capture satellite module

Solaris Space Defence Laser

Satellite-mounted high powered laser to track, intercept and neutralise threats to satellites

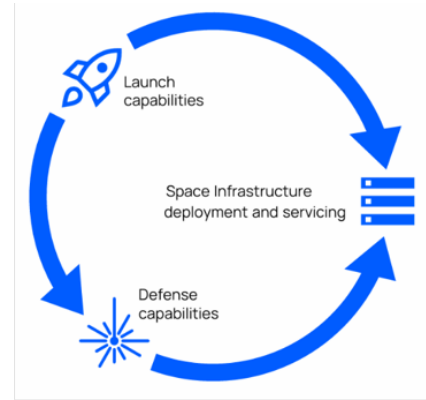
Orbital Data Centres, Telecommunications

Deployment, protection & maintenance of orbital data centres and other sovereign space assets

Orbit Boy's three core systems are:

- 1. Orbit Boy Launcher:** a reusable air-launch system for placing satellites and payloads into orbit on 24-hour notice.
- 2. ARCap Module:** an autonomous satellite module that can dock with and service other satellites in orbit.
- 3. Solaris Space Defence Laser:** a satellite-mounted high-powered laser that can track, intercept and neutralise threats to satellites.

Together, these three Orbit Boy systems are designed to form the infrastructure required to launch, service and defend satellites and orbital assets. Orbit Boy is in partnership with the European Space Agency (ESA), ThalesAlenia Space, the German Space Agency (DLR), the Polish Space Agency (POLSA), the Korean AeroSpace Administration (KASA), Agenzia Spaziale Italiana, the Luxembourg Space Agency, and the Ukrainian Space Agency.



CAPITAL MARKETS LISTING — 14D EQUITY POSITION

Orbit Boy plans to pursue a U.S. capital market listing in Q1 2027, in tandem with the commencement of defence vehicle production. Orbit Boy has previously advised it is exploring listing options in the US and Europe. Discussions with Nasdaq and NYSE are progressing.

Under the agreement announced on 17 June 2026, 14D subscribed for equity in Orbit Express Pty Ltd (ACN 649 857 965), Orbit Boy's planned listing creates a potential value-realisation pathway for that holding. 14D is developing its SiNTL battery technology with George Washington University in the U.S.

SiNTL™ — DEFENCE LAUNCH VEHICLE APPLICATION

Orbit Boy has selected SiNTL as the primary energy storage candidate for its defence launch vehicles and ARCap module, ahead of the production commencement. The selection is based on:

- **Energy density:** SiNTL is achieving at least 30% greater capacity than graphite-anode batteries. In launch vehicles, battery mass competes directly with payload and propellant mass, so energy density is a primary design constraint.
- **Manufacturing compatibility:** SiNTL is designed to be integrated into existing lithium-ion production processes without significant retooling, which is important for a Q1 2027 production schedule.
- **Cycle life:** SiNTL cycle characteristics will be optimised for the repeated charge-discharge cycling that satellite and orbital module power systems require.
- **Peak-power performance:** The Solaris laser payload requires high peak-power, short-duration discharge. The next generation of SiNTL is being developed for these characteristics under the contingent Phase 2 workstream.

Subject to the testing programme milestones being met, Orbit Boy intends to integrate SiNTL based batteries into its production launch vehicles. Commercial supply terms will be covered by a separate binding agreement.

DEFENCE LAUNCH VEHICLES

Defence and military satellites perform a variety of critical functions to support national security and military operations, primarily:

1. Communication:

- Secure and reliable communication channels for military forces.
- Enables real-time coordination and control of military operations.

2. Surveillance and Reconnaissance:

- High-resolution imagery and video capture of terrestrial and maritime regions.
- Monitoring troop movements, equipment, and infrastructure of adversaries.

3. Navigation and Positioning:

- Global Positioning System (GPS) for precise location data.
- Assists in navigation for military vehicles, aircraft, and naval vessels.

4. Early Warning Systems:

- Detection of missile launches and other threats.
- Provides critical early warning to enable defensive measures.

5. Electronic Intelligence (ELINT):

- Interception and analysis of electronic signals and communications.
- Helps in understanding enemy capabilities and intentions.

6. Signals Intelligence (SIGINT):

- Gathering intelligence from various communication sources.
- Includes interception of radio, radar, and other signals.

7. Weather and Environmental Monitoring:

- Provides weather data crucial for planning military operations.
- Monitors environmental conditions that might affect military activities.

8. Space Situational Awareness (SSA):

- Tracking space debris and other satellites.
- Ensures the safety and operability of defense satellites.

9. Nuclear Detonation Detection:

- Detects and analyzes nuclear explosions.
- Provides data for treaty verification and nuclear incident response.

10. Cyber Operations Support:

- Enables cyber defense and offensive capabilities.
- Protects military satellite networks from cyber threats.

These functions are vital for maintaining national security, conducting military operations, and ensuring strategic advantages in defence contexts.

Many of these launch vehicles are also used for civilian or scientific missions, making them dual-use systems.

PROGRAMME STRUCTURE

The testing programme runs in six milestone-gated stages:

- **Stage 1:** SiNTL sample and cell validation.
- **Stage 2:** Laboratory cycling and low-Earth-orbit eclipse testing.
- **Stage 3:** Battery pack and module build with the contract manufacturer.
- **Stage 4:** Bench, battery-management and interface testing.
- **Stage 5:** Environmental and space-representative qualification testing.
- **Stage 6:** Final qualification report, including Solaris battery assessment if Stage 1 passes.

Each stage has a pass/fail review before the next begins. The parties are in discussions to extend the agreement scope to cover defence launch vehicle applications. Amended terms are expected to be finalised ahead of the Q1 2027 production commencement.

14D will update the market as testing milestones are completed, as supply terms are agreed, and as further detail on the Orbit Boy listing becomes available.

COMMERCIAL MODEL

Ownership of SiNTL and all related intellectual property remains with 14D and George Washington University at all times.

Subject to successful testing and separate binding agreements, 14D expects revenue from anode material supply, battery technology licensing, royalties on approved packs or platforms, and supply to defence launch vehicle production. Any future production or supply will be covered by separate binding agreements.

Commenting on the development, 1414 Degrees' Executive Chairman Dr Kevin Moriarty said:

"Orbit Boy's decision to select our SiNTL™ batteries for its defence launch vehicles is a strong validation of the technology's performance characteristics, and it materially extends the commercial scope of our partnership beyond the original satellite and space laser applications. Equally significant is the value-realisation pathway this creates for our equity position in Orbit Express, as Orbit Boy progresses discussions toward a U.S. stock exchange listing. We look forward to updating shareholders as the testing programme and supply discussions advance."

AUTHORISED BY:

Dr Kevin Moriarty, Executive Chairman on behalf of the Board of Directors

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ABOUT ORBIT BOY

Orbit Boy (<https://orbitboy.rocks/>) is a space company based in Turin, Italy. It has developed a space launch vehicle (the Orbit Boy Launcher), an in-orbit docking module (ARCap) and a space-based defence laser (Solaris). Orbit Boy has been developed with the exclusive cooperation of Yuzmash, one of the world's top manufacturers of launch vehicles. Orbit Boy was co-founded by three former Chairmen of the State Space Agency of Ukraine, who together were responsible for more than 150 successful rocket launches over three decades.

ABOUT 1414 DEGREES LIMITED

1414 Degrees (ASX:14D) is advancing an integrated clean-energy and industrial decarbonisation platform spanning grid-scale storage, industrial heat, hydrogen and advanced battery materials.

The Company's strategy combines near-term infrastructure revenue with scalable technology commercialisation, underpinned by deep expertise in energy-dense silicon systems and materials engineering. 1414 Degrees owns the Aurora Energy Precinct in South Australia, a development-ready energy and industrial site spanning 16km² within the Upper Spencer Gulf Renewable Energy Zone. Aurora is designed for firm renewable electricity and co-located high-demand users, with grid access,

development approvals and proximity to fibre infrastructure supporting global connectivity. The site is strategically positioned to support data centre operators and other energy-intensive industries requiring reliable, low-emissions power at scale. The Stage 1 140 MW / 280 MWh Battery Energy Storage System (BESS) represents a near-term revenue opportunity, with expansion potential aligned to customer demand.

Core Platforms:

SiNTL™: A silicon-enhanced anode material designed to increase lithium-ion battery energy density while remaining compatible with existing manufacturing processes.

SiBrick®: Silicon-based thermal energy storage media forming the foundation of the Company's long-duration energy storage systems.

SiBox® (Industrial Heat-as-a-Service): Long duration energy storage technology that converts low-cost renewable electricity into dispatchable high-temperature heat, supporting industrial decarbonisation across energy-intensive sectors.

SiPHyR®: A silicon-based methane pyrolysis reactor integrating thermal storage to produce low-emissions hydrogen and solid carbon using renewable energy sources.

1414 Degrees' technologies are unified by a single materials platform — leveraging silicon to store, convert and enhance energy across multiple sectors.

For more information, please visit www.1414degrees.com.au

Forward-looking statements

This announcement includes forward-looking statements which may be identified by words such as 'anticipates', 'believes', 'expects', 'intends', 'may', 'will', 'could', or 'should' and other similar words that involve risks and uncertainties. These forward-looking statements are based on 1414 Degrees' expectations and beliefs concerning future events as at the date of this announcement. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of 1414 Degrees, which could cause actual results to differ materially from such statements. 1414 Degrees makes no undertaking to update or revise the forward-looking statements made in this announcement to reflect any change in circumstances or events after the date of this announcement.