



SABER ASTRONAUTICS AUSTRALIAN ASTRONAUT PROGRAM

CALL FOR PRODUCT EXPERIMENTS, RESEARCH AND DEVELOPMENT IN THE INTERNATIONAL SPACE STATION FOR AUSTRALIA

1. BACKGROUND INFORMATION

Saber Astronautics recently signed a deal with private spaceflight leader Axiom Space, Inc. to create an Australian presence on the International Space Station (ISS) and future Axiom Station. Saber Astronautics will develop the first formal program to enable Australians and Australian industry to, via Axiom, access the Station's orbiting microgravity laboratory and develop a new generation of space-developed products for human health, materials, electronics, cleantech, and more.

The **Saber Astronautics Australian Astronaut Program** aims for direct industrial involvement and flights using people selected from the Australian public opening the benefits for broader industrial use by conventional industry.

The ISS program has been a test bed for advanced scientific research since its completion in 2011, with much of the technology previously developed for space finding "spinout" advantages for the commercial sector on Earth.

NASA competitively selected Axiom to add a series of its privately developed modules to the ISS beginning in late 2024, planned to later detach and become a free-flying, next-generation station – a move widely understood to be paving the way for the commercial successor to the 20-year-old station. Axiom Space successfully launched and returned their first private astronaut mission AX-1 to ISS in April 2022 and are planning future missions beyond 2026. The unique environment, such as a lack of gravity, easy access to cooling, and a nearly 100% sterile environment is enabling a new generation of products beyond the spin-outs, with strong commercial potential. Examples include near perfect fibre optics, protein crystals for better drugs, and quantum computing. The clean vacuum of outer space can make thinner, purer materials like semiconductors and ultra-pure metals.

The deal with Axiom builds on Saber Astronautics' growing leadership in space operations. Saber currently owns and operates the Responsive Space Operations Centre (RSOC) based in Adelaide and Colorado. The Adelaide RSOC received \$6M funding from the Australian Space Agency's Space Infrastructure Fund last year. Supporting astronauts is a long-term goal of Saber's RSOC program accelerated by the agreement with Axiom.



Saber Astronautics aims to encourage excellence and community involvement, enhance innovation, together with the promotion of Australia's Space Sector and the empowerment of the space ecosystem.

2. SABER ASTRONAUTICS AUSTRALIAN ASTRONAUT PROGRAM OVERVIEW

This call is open to any Australian organization or team that wishes to develop new products or conduct research aboard the ISS: corporations, entrepreneurs, startups, not-for-profits, academic institutes, and research centers. Collaboration is encouraged.

Saber Astronautics is the program facilitator. Saber's will directly engage Australian companies and Academia in each state, in coordination with local governments. Saber aims to join a 30 day Axiom Space mission in approximately Q1 2024. Axiom Space has an active relationship with the ISS National Lab that, among other things, permits Axiom to request and obtain transportation for Axiom customer cargo to/from the ISS on ISS Program sponsored cargo missions.

The Program is divided into the following phases:

- **Phase 1** includes the Products-Call to identify which products will take part in the Saber Astronautics ISS Astronaut Program according to specific selection criteria. Workshops will run in every State.
- **Phase 2** includes the Astronaut-Call to select the Australian who will travel to ISS*
- **Phase 3** includes the training of the Astronaut
- **Phase 4** includes the flight to the ISS

**If there are too few projects to cover the cost of the Australian Astronaut then Axiom Space will provide the Astronaut who will execute the experiments.*

3. PHASE 1

Saber releases the Products-Call to the Industry, Academia and the government.

Opening date:	4/7/2022
Closing date and time:	5:00pm Australian Eastern Standard Time on 30/9/2022 Please take account of time zone differences when submitting your application
Policy entity:	Saber Astronautics Australia
Administering entity:	Saber Astronautics Australia
Enquiries:	If you have any questions, contact us on astronauts@saberastro.com
Date guidelines released:	4/7/2022
Type of Call opportunity:	Open competitive



4. AIM AND CONDITIONS OF THE PRODUCTS-CALL

As part of the program, Saber will engage Australian companies directly via this Call to identify advanced products related to medicine, technology, manufacturing, agriculture, exploration and other sectors that can benefit from the unique environment of the ISS. This is a call to the industry to test their products in space.

All costs, including project development, modifications, packaging, shipping, and implementation partner services to conduct experiments in orbit are the responsibility of the proposers.

Cargo capacity to the ISS is limited. All proposals will be considered per the assessment criteria below.

Some selected proposals may need to pre-position their supplies and hardware on one of these earlier cargo missions. Axiom will provide all arrangements for this service.

For non-governmental facilities at the ISS, Axiom space will facilitate the required arrangements.

Each of the selected proposers will sign an agreement with Axiom Space to access the mission and for any implementation partner services required on the mission and the ISS.

5. ASSESSMENT CRITERIA

Saber will assess the products using the selection criteria and process below:

Preliminary feasibility

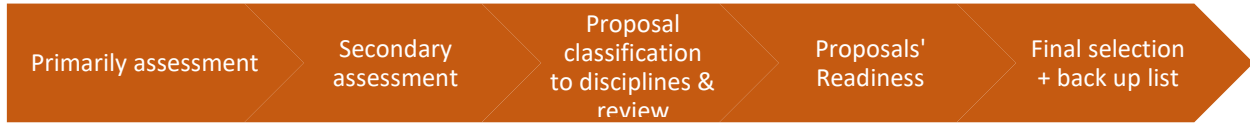
- Availability of required ISS and commercial partner resources based on Ax-4 mission timeline
- Financial stability of the organisation
- Initial feasibility

Secondary assessment

- The product will be invented/enhanced because of the conditions in space
- The product will benefit the Australian industry
- The product or service has a financial future
- Technical feasibility and chance of success



Selection Process



Saber Astronautics will gather a scientific-technological committee including top-level multidisciplinary experts from academic institutes, governments, and the Space Agency for the advice and support of the proposals' evaluation and selection process.

6. PHASE 1 SCHEDULE**

Call for proposals release	4 th of July 2022
Call for proposals industry briefing	19 th of July 2022
Q&A closing date	19 th of September 2022
Proposals closing date	30 th of September 2022
Primarily assessment	31 st of October 2022
Secondary assessment	27 th of March 2023
Proposal classification to disciplines & review	24 th of April 2023
Project readiness review	26 th of June 2023
Final selection + back up list	17 th of July 2023
Manifest planning	Aug 2023-Q1 2024 (TBC Axiom Mission)
Flight down payment	
Flight readiness review	
Ship to launch	

**Changes in the schedule are expected

7. ELIGIBLE PARTICIPANTS

You must be an Australian entity: Academic Institutes, research centres, not-for-profit organizations, entrepreneurs, startups, and commercial organizations. Collaboration between any of these, including with international partners, is encouraged.



8. RESPONSE SECTION

You will need to respond to the following questions and send your responses to astronauts@saberastro.com

A. Cover Page: Participant's details

Name of Participant	
Address of Participant's Registered Office	
Participant's Australian Business Number	
Office Telephone	
Office email	
Website	

B. Participant's contact person

Name	
Title	
Phone	
Email	

C. Project Proposal (up to 10-pages)

All proposals must follow the following format with headers. The page count is a suggestion, noting we are limiting all submissions to 10 pages maximum. All fonts must be 10pt or larger.

1. Executive Summary (1-page)
2. Project background, technical history (1-page)
3. Project goals
4. Technical Description (4-pages)
5. Flight Readiness / prep plan, safety, and timeline
6. On-orbit manifest test plan (high-level requirements)
7. Budget
8. Response to Secondary Assessment Criteria

Note- Any documentation beyond 10-pages will not be reviewed. We will only consider the first 10-pages.

Also please include the following items in your submission. These do not count towards the 10 page limit.



1. Quad chart (1-page)
2. Proof of funding (1-page)
3. Reference list (optional; 1-page)
9. Ethical certification requirements

9. CONTACT INFORMATION

For any questions, please contact

astronauts@saberastro.com

10. INDUSTRY BRIEFING

Saber Astronautics will hold an industry briefing webinar on the 19th of July.

Follow the link and register your attendance and receive the briefing connection details.

<https://www.eventbrite.com.au/e/saber-astronautics-australian-astronaut-program-industry-briefing-tickets-378477214537>



11. ANNEXES

ANNEX I

Information: Axiom Space, NASA, ISS Laboratory, List of Implementation Partners for International Space Station (ISS) Services and other Facilities

This is Axiom Space website for information <https://www.axiomspace.com/>

Facilities and Capabilities overview on the International Space Station (ISS) can be found at the following links:

https://www.nasa.gov/mission_pages/station/research/browse_facilities.

https://www.nasa.gov/mission_pages/station/research/experiments/explorer/

The ISS is supported by an ever-growing network of individuals and organizations that actively and passionately share in the mission of promoting and sustaining space-based research. The Implementation Partners may be ideal to support and facilitate your research project, including translating your science from the bench to a space-based platform.

Information about the ISS laboratory <https://www.issnationallab.org/>

Access the link below to see a list of Implementation Partners currently elevating the caliber of ISS R&D by enabling investigations onboard this powerful research platform. For facilities at the ISS, Axiom Space will facilitate the required arrangements.

<https://www.issnationallab.org/implementation-partners/>

In addition, the link below includes ANU National Space Test Facility

<https://inspace.anu.edu.au/nstf>

NASA's pricing can be found here

<https://www.nasa.gov/leo-economy/commercial-use/pricing-policy>



ANNEX II

NDA draft (to be signed and returned to Saber Astronautics - optional)

Confidentiality Agreement

This Agreement is entered into this _____ day of _____, 2022 by and between

and

Saber Astronautics (Saber Astronautics Australia Pty Ltd at 71 Balfour St, Chippendale NSW 2008 and Saber Astronautics, LLC 1722 14th St Suite 200, Boulder CO 80302 USA hereinafter "Saber Astronautics").

Both entities together are "the Parties"

WHEREAS Discloser possesses certain ideas, data, technology, and information relating to products and strategic planning that is confidential and proprietary to Discloser (hereinafter "Proprietary Information"); and

WHEREAS the Recipient is willing to receive disclosure of the Proprietary Information pursuant to the terms of this Agreement for the purpose of providing services relating to the Discloser's business, discussion of marketing and strategic planning, and Intellectual Property. The Recipient is expected to acquire knowledge of and to create Proprietary Information in the course of performing said services for the Discloser;

NOW, THEREFORE, in consideration of these premises and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

Definitions:

Proprietary Information as used in this Agreement shall mean any information, whether written or oral, originated by or peculiarly within the knowledge of a Party, which is marked or otherwise designated as proprietary or confidential in accordance with this Agreement. Such information shall include business and technical information and shall include all documentation containing in whole or in part such information. The Parties hereby



acknowledge that any Proprietary Information disclosed hereunder will be considered a “trade secret” or “proprietary”.

Document as used in this Agreement, shall mean any tangible object or item which contains information and shall include but not be limited to: business plans and reports, product plans, proposal plans, technical specifications, test results, process and fabrication information, models, tools, hardware, software, drawings, manuals, technical presentations, flowcharts or any other written or oral information of any kind.

1. All Proprietary Information shall be identified prior to disclosure with an appropriate Proprietary or proprietary marking or identification. All Proprietary Information disclosed by the Parties orally or through email shall be identified as proprietary at the time of disclosure.
2. Information shall not constitute Proprietary Information subject to this Agreement if such information:
 - a. is in the public domain at the time of disclosure or is subsequently made available to the general public through no fault of the Recipient, or
 - b. was known to the Recipient at the time of disclosure, by other than disclosure by the Discloser, or
 - c. becomes known to the Recipient without similar restrictions as to its disclosure or use from a source other than the Discloser, or
 - d. is used or disclosed under this Agreement more than five (5) years from the date or receipt of such information; or
 - e. is independently developed by the Recipient and was not acquired directly or indirectly under any secrecy obligation from the Discloser.

Each Party may disclose Proprietary Information to its respective officers, directors, employees, auditors, accountants, attorneys, investors, or representatives (“Representatives”) who have a need to know the particular Proprietary Information and who agree to protect and handle the Proprietary Information of the other(s) in accordance with this Agreement; provided, however, that each Party will be responsible for its respective Representatives’ compliance with this Agreement.

4. The Recipient agrees to use the Proprietary Information only in furtherance of the purposes for which the disclosing Party has disclosed such information to the Recipient.
5. The Recipient must immediately, on request at any time from the Discloser return all Proprietary Information, destroy and certify in writing that the Proprietary Information is destroyed; or destroy and permit an employee of the Discloser to witness the destruction of, all the Discloser’s Proprietary Information, stored in any medium, in the Recipient’s possession or control. This includes the original medium, copies and that part of notes and other records prepared by the Recipient based on or incorporating any Proprietary



Information). This requirement excludes information that a Recipient is required to disclose in order to comply with any reporting obligations to any government.

6. This Agreement shall apply to Proprietary Information disclosed after the date of this Agreement, and the protection afforded by this Agreement for such Proprietary Information shall continue for a period of five (5) years from the date of disclosure. The term of this Agreement is five (5) years from the date first written above and may be extended by the written agreement of both parties.

7. The Parties shall comply with all laws, including all statutes and regulations governing the export of technical data, and hereby agree to indemnify and hold harmless the other Party from any failure by such Party, its agents, or employees to comply with any provisions of such laws.

8. Proprietary Information shall remain the property of the originating Party. Neither this Agreement nor the disclosure of Proprietary Information shall be construed as granting any right or license under any inventions, patents, copyrights, or the like, now or hereafter owned or controlled by either Party. Any such disclosure shall not constitute the infringement of any patent or other rights of others. No accuracy or completeness of any Proprietary Information is provided herein.

9. Each Party shall maintain the Proprietary Information disclosed to it in accordance with established procedures and with at least the same degree of care it uses to preserve and safeguard the confidentiality of its own Proprietary Information, and in no instance less than the care a reasonable person would take under like circumstances. A Party shall immediately advise the other in writing of any inadvertent disclosure, misappropriation, or misuse by any person of a Party's Proprietary Information.

10. This Agreement constitutes the entire Agreement between the Parties hereto with respect to the subject matter hereof and supersedes all previous agreements and understanding related thereto and may not be changed or modified orally, but only by an instrument in writing signed by both Parties.

11. This Agreement shall not be assigned by either Party without the prior written consent of the other.

12. Neither Party shall be liable for the inadvertent or accidental disclosure of Proprietary Information obtained hereunder if such disclosure occurs despite the exercise of the same degree of care as it normally takes to preserve and safeguard its own Proprietary Information.

13. The Recipient agrees that the Discloser will be irreparably harmed and money damages will be inadequate compensation to the Discloser in the event that the Recipient breaches any provisions of this Agreement which relate to the Discloser's Proprietary Information. All provisions of this Agreement shall be specifically enforceable by the Discloser and their



agents and/or representatives by injunctive or other relief. The provisions of this paragraph shall survive the expiration or termination of this Agreement.

14. This Agreement shall not be construed as a teaming, joint venture or other such arrangement. Nothing in this Agreement shall grant to either Party the right to make commitments of any kind for or on behalf of the other Party without the prior written consent of the other Party. The parties agree that in any legal proceeding which arises out of or relates to this Agreement, the prevailing Party shall be entitled to recover its costs and expenses associated with such proceeding including reasonable attorney's fees.

15. This Agreement and all rights and obligations hereunder shall be governed by the Laws of the place of performance, (excluding its conflict of laws provision) and the extent applicable, the laws of Colorado, USA.

16. The acceptance of this Agreement or any modification of this Agreement may be made by electronic transmission. Receipt of the electronic transmission shall for the purposes of this Agreement be deemed to be an original, including signatures and may be executed in multiple counterparts.

IN WITNESS WHEREOF, the parties have executed this agreement effective as of the date first written above.

Signed (Party 1) _____

Date:

Dr. Jason Held
CEO
Saber Astronautics Australia, Pty Ltd
Saber Astronautics, LLC

Signed (Party 2) _____

Date:

Print