

Project Brief

UWA Space Heritage Record and Digital Catalogue Project International Space Centre, The University of Western Australia

Project Context

The International Space Centre (ISC) at The University of Western Australia is seeking proposals to deliver a fixed-term project to identify, document, and digitally catalogue UWA's full space and microgravity heritage.

UWA has played a sustained and internationally recognised role in space and microgravity research. The University has a long history of space involvement, from early contributions under Professor Brian O'Brien, through involvement in Apollo-era science, to contemporary activities including experiments flown on the International Space Station, drop-tower and suborbital campaigns, spacecraft software development, space rocks, satellite missions, and competitive student rocket programs.

These contributions span physical artefacts, experimental campaigns, missions, software and code, people and teams, and institutional programs. At present, this heritage is dispersed across the University and held in a mixture of formal records, informal knowledge, laboratories, storage spaces, digital repositories, and personal collections.

This project represents the first foundational step in creating a coherent, authoritative institutional record of UWA's space and microgravity activity. The outputs will underpin future phases, including public-facing digital content and potential physical or hybrid displays.

Project Objectives

The objectives of this project are to:

- Identify and document the full breadth of UWA's space and microgravity activities, past and present;
- Create a structured digital record of both tangible (e.g. physical artefacts) and intangible heritage (such as research or collaborations);
- Capture the people, context, and long-term impact associated with each contribution; and
- Provide the ISC Board with a clear, evidence-based overview of UWA's space heritage assets and activities.

Scope of Work

Discovery and Investigation

The project will involve systematic investigation across UWA to identify and document space- and microgravity-related contributions, including but not limited to:

- Experiments flown on the International Space Station;
- Drop-tower, parabolic flight, sounding rocket, and suborbital experiments;
- Contributions to historic space programs (including Apollo-era science and instrumentation);
- Satellite missions, payloads, and operational support;
- Space rocks;
- Software, algorithms, and code developed for space systems (e.g. spacecraft operations, mission analysis, flight software);
- Student and competitive rocket activities, including notable UWA Aerospace launches; and
- Physical artefacts such as instruments, hardware, prototypes, models, documents, and memorabilia.

Discovery activities may include interviews, archival research, document review, and on-site inspections, and will require independent investigative work across faculties, research groups, and legacy networks.

Documentation and Digital Cataloguing

Each identified item (e.g. experiment, mission, codebase, artefact, or program) will be recorded as a discrete entry in a digital catalogue. Each entry should include, at a minimum:

- Title and category (e.g. Artefact, Experiment, Mission, Software, Program, People)
- Description of the activity or item
- Dates and duration
- Number of people involved and key roles
- UWA's contribution and collaborators (where relevant)
- Long-term scientific, technical, educational, or societal impact
- References to associated materials, including:
 - Photographs
 - Physical artefacts (if any)
 - Documents or publications
 - Software repositories or code references (where appropriate)

The catalogue should apply consistent metadata and enable cross-linking between people, projects, artefacts, and images.

Digital Catalogue Development

The project will deliver a structured digital catalogue in an agreed format that:

- Is suitable for long-term institutional use;
- Supports search, filtering, and cross-referencing;
- Can be readily adapted for future exhibition, web, or public-engagement use; and

- Provides a reliable foundation for ongoing curation and expansion.

Reporting and Presentation

- Provide periodic progress updates to the International Space Centre;
- Deliver a final digital catalogue in an agreed format;
- Produce a concise summary report identifying:
 - Key themes and milestones in UWA's space heritage;
 - Strengths, gaps, and risks in the current historical record; and
 - Opportunities for future display or storytelling.
- Present findings to the ISC Board in a board-ready format.

Deliverables

At the conclusion of the project, the successful tenderer will deliver:

- A comprehensive digital catalogue of UWA's space and microgravity heritage;
- A summary report suitable for board consideration; and
- A presentation to the ISC Board outlining findings and recommendations.

Project Duration and Effort

- Fixed project duration of approximately **three (3) months**;
- Estimated effort of approximately **8 hours per week**;
- Work will require on-campus presence for interviews and artefact inspection, with flexibility in scheduling.

Required Capability and Experience

Tenderers should demonstrate:

- Experience in investigative research, archival work, heritage documentation, or collections management;
- Strong stakeholder engagement and interview capability;
- Experience developing structured digital catalogues or databases;
- Ability to work independently, manage ambiguity, and follow investigative leads; and
- An understanding of, or demonstrated interest in, space, science, engineering, or research history.

Experience within a university, museum, library, or research environment will be highly regarded.

Governance and Reporting

The project will be managed by the International Space Centre at The University of Western Australia. The successful tenderer will work closely with ISC staff and provide agreed progress updates throughout the project.

Future Context

This project is a standalone engagement and does not constitute an ongoing role. The outputs will inform subsequent phases, including the potential design and development of physical and digital displays of UWA's space heritage.