



## PERMITTING DECISION SUMMARY

**Vincent Freeman**

**Zenno Astronautics Limited**

1. Zenno Astronautics Limited is an Auckland-based aerospace company which specialises in superconducting magnets for space applications.
2. Vincent Freeman is a technology demonstrator payload for Zenno's novel high-temperature superconducting magnetorquers used for satellite attitude (orientation) control.
3. The payload will be hosted inside a commercial satellite carrier, along with other customer payloads. The payload will remain secured to the inside of the satellite carrier and will not be released into orbit.
4. Payloads are permitted in line with the [Outer Space and High-altitude Activities Act 2017](#) and the [Outer Space and High-altitude Activities \(Licences and Permits\) Regulations 2017](#).
5. Each payload has been approved by the Minister for Space, on advice from officials across agencies. When approving payloads, the Minister needs to be satisfied that:
  - a. The applicant has taken and will continue to take all reasonable steps to safely manage the operation of the payload.
  - b. The proposed operation of the payload is consistent with New Zealand's international obligations; and
  - c. The applicant has an orbital debris mitigation plan that meets prescribed requirements.
  - d. Despite being satisfied of these matters, the Minister may nevertheless decline a permit if they are not satisfied that the proposed operation of the payload is in New Zealand's national interest.

Date Granted	Authorisation Number	Payload Name	Owner or Operator	Country of Origin
16 June 2025	250459-PPT	Vincent Freeman	Zenno Astronautics Limited	New Zealand