



PERMITTING DECISION SUMMARY

Copia

Astrix Astronautics Limited

1. Astrix Astronautics Limited (Astrix) is a New Zealand start-up company developing inflatable solar arrays for satellites. The founders came out of Auckland program for space systems and quickly developed their business to provide their power system for the constellation industry. With a power system specifically designed to overcome the extreme mass and volume constraints in space this allow fleets of satellites to scale rapidly with the high power they need.
2. Astrix have developed novel solar panel technology. Copia is an inflatable solar panel that unfolds when in space, like origami. Copia's solar panels are highly compact and 10x lighter than traditional solar panels. The reduced mass and volume allow for satellites to deploy larger arrays and generate more power.
3. Copia is a technology demonstration of Astrix's solar panel. Copia is designed to be secured to a Rocket Lab launch vehicle's third stage, which will provide the communication equipment required to verify the technology demonstration.
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 Economic Development, 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 he is 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
19 April 2022	210188-PPT	Copia	Astrix Astronautics Limited	New Zealand