# Northern Territory Government Submission to the Joint Standing Committee on Treaties

The Northern Territory Government's submission concerns the Exchange of Notes to extend the Exchange of Notes constituting an Agreement between the Government of Australia and the Government of the United States of America to Amend and Extend the Agreement concerning the Conduct of Scientific Balloon Flights for Civil Research Purposes of 16 February 2006

## The Northern Territory Government's interest in this extension

The Territory Government is working to realise Australia's vision to secure a greater share of the global space economy, and welcomes the opportunity to provide comment on the extension to this Exchange of Notes between the Government of Australia and the Government of the United States of America to amend and extend the Agreement concerning the Conduct of the Scientific Balloon Flights for Civil Research Purposes of 16 February 2006.

The Territory Government is supporting investment attraction and project facilitation activities that align with the NT's key competitive advantages including:

- space launch and associated launch supply chains
- stratospheric ballooning and high altitude pseudo satellites (HAPS)
- ground station systems
- downstream space industries such as earth observation, data processing and technology services

The extension of this Treaty is crucial for the continued development of a key sub-segment of the Territory space industry: stratospheric ballooning and high altitude pseudo-satellites (HAPS).

HAPS are an emerging communications and earth observation platform attracting significant international research and development funding from companies across a broad range of sectors including aviation, tech, telecoms, defence, startups and space. There are at least 40+ HAPS programs at various stages of development, including Airbus' Zephyr and Boeing's Aurora.

HAPS operate in between the space occupied by drones and below and satellites above. Highly flexible and relatively low cost, HAPS – high altitude unmanned aerial vehicles (UAVs), balloons and airships – are able to remain in the air for months at a time. The Territory Government recognises the extraordinary potential of earth observation data to enhance the productivity and efficiency of traditional industry sectors such as agriculture and mining.

## The Territory and NASA's Alice Springs Ballooning Facility

The Northern Territory has long been a site of international space industry collaboration, hosting the Alice Springs Ballooning Facility since the 1970s. Owned by the National Aeronautics and Space Administration (NASA), managed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and operated by the University of New South Wales, the Alice Springs Ballooning Facility has for decades hosted NASA and the French (CNES) and Japanese (JAXA) space agencies while they conducted their stratospheric ballooning campaigns as part of various scientific research programs.



NORTHERN TERRITORY GOVERNMENT

The use of the facility is governed by the 2006 bilateral treaty between the United States and Australia that is the subject of the extension tabled on 6 June 2024.

Alice Springs has been identified as one of the best locations in the world for the launch and return of stratospheric balloons and HAPS due to:

- its central position
- ideal weather providing year-round launch ability
- the ability to reach key markets whilst avoiding no-fly zones
- short transit times to reach Latin America, Asia and Africa
- ease of recoverability / multiple landing zones
- suitability for R&D launches.

However, the facility is heavily underutilised, representing missed opportunities for offering stratospheric balloon launch and tracking sovereign capability, increasing economic activity and enhancing Australia's international reputation as a destination of choice for space agencies.

The Northern Territory understands through discussions with CSIRO that the facility requires urgent upgrades to internet connectivity, while the launch area needs to be made weather-proof to ensure launches are possible following periods of heavy rain. These drawbacks may be contributing to underutilisation of the facility by international space agencies.

# Opportunities to enhance collaboration

The Extension of this Treaty may present an opportunity to explore improvements to the infrastructure at NASA's Alice Springs Ballooning Facility. There may also be an opportunity to expand collaboration with other countries actively involved in stratospheric ballooning, such as France and Japan, and also simplify the approval process for commercial use of the facility.

The current space industry operating environment is dramatically different to what it was in 2006 when the Treaty was originally negotiated. Stratospheric balloons:

- have become a key platform for private sector companies developing high altitude pseudo-satellites (HAPS), some of which have a presence in Australia
- are increasingly used for payload qualification and testing more broadly (demand for which can only increase)
- are being tested by Defence as a targeted and cost effective alternative to satellites
- are used by universities for scientific and educational purposes both domestically and internationally.

There is arguably an opportunity to better position Australia to take advantage of stratospheric ballooning as a platform for international collaboration, engagement and investment attraction. The Alice Springs Ballooning Facility is heavily underutilised, hosting international space agencies only once every few years.

Through this Treaty with the United States, there could be an opportunity to enhance collaboration and drive more active usage and involvement of the facility by Australia and the United States, their international partners and private operators.