US firm Reflect Orbital, which plans to 'sell sunlight at night', books two launches with India's Skyroot Aerospace

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News

Reflect Orbital, a California-based US start-up, announced on 14 Oct 2026 that it has booked two dedicated rocket launches with Hyderabad's Skyroot Aerospace. The first will fly on 'Vikram-1' and the second on 'Vikram-1U', still under development; launch dates and prices were not disclosed. The company plans to use mirrors in orbit to reflect sunlight onto chosen spots on Earth (a patch about 5 km across) after sunset – for uses such as search-and-rescue and extending power generation at solar farms.

Key facts

Deal	Reflect Orbital (California, USA) – Skyroot Aerospace (Hyderabad); announced 14 Oct 2026
Rockets	1st: Vikram-1; 2nd: Vikram-1U (extra first-stage boosters, under development)
Concept	Orbital mirrors reflect sunlight to light a patch about 5 km wide at night
Demo satellite	'Eärendil-1' – cleared by the US FCC in July 2026
Vikram-1	Maiden orbital flight 'Aagaman' – 18 July 2026, Sriharikota; up to 350 kg to LEO

Concerns	Light pollution, interference with astronomy, wildlife and human circadian rhythms

Background

- Skyroot Aerospace – Hyderabad; co-founder Pawan Kumar Chandana (CEO). The 'Vikram' rockets are named after Vikram Sarabhai, father of the Indian space programme. 'Vikram-S' (mission Prarambh) flew from Sriharikota on 18 Nov 2022 – India's first private rocket (sub-orbital). Vikram-1 became the first orbital rocket launched from Indian soil by a private Indian company (18 July 2026).
- Policy: the space sector was opened to private players in 2020; IN-SPACe (Indian National Space Promotion and Authorisation Centre) is the single-window body that promotes and authorises private space activity, headquartered in Ahmedabad. The Indian Space Policy 2023 was approved by the Union Cabinet in Apr 2023.
- Science: a mirror works by reflection – angle of incidence equals angle of reflection. A similar attempt was made before: Russia's 'Znamya' experiment (1993) sent a beam of reflected sunlight from orbit to Earth; it was later dropped for lack of funds.

Tamil Nadu link: ISRO is building the small-satellite launch complex (SSLV Launch Complex) at Kulasekarapattinam, Thoothukudi district, on about 2,233 acres at ₹986 crore – the PM laid the foundation stone in Feb 2024. In Aug 2026 IN-SPACe invited Expressions of Interest from private firms to operate and maintain it; ownership stays with the Department of Space.

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