IAF SPACE EXPLORATION SYMPOSIUM (A3)
Moon Exploration – Part 1 (2A)

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ONEIROS: A GIANT STEP TOWARDS AFFORDABLE MOON LANDING

Abstract

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ONEIROS is a TEC private funded development of a Lunar Hopper demonstrator in close collaboration with UAE. It is targeting rapid, cost-effective, and high-performance access to the Moon's surface & mobility. Leveraging advanced technologies (Lox/Methane Throttleable engine, cryogenic tanks, autonomous navigation system, optimized landing legs), agile development methodology, and proprietary solutions, the project aims to slash development and operational costs compared to traditional institutional programs.

The team has developed several de-risking breadboards to better mitigate technical risks of the flight demonstration foreseen in 2027 in the UAE desert with the ONEIROS demonstrator.

Through an exhaustive presentation of the development approach and presentation of the different breadboards, a presentation of the ONEIROS vehicle and its technical characteristics will be detailed.