

Commercial ISRU Flight Demonstrator – MINER

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NASA has performed several recent assessments relative to a possible oxygen extraction demonstration at the lunar surface. The project is entitled: Mini-ISRU Nodal Evaluation of Regolith (MINER). The concept is to leverage commercial capabilities and partner with NASA to demonstrate ISRU O₂ production within a lunar flight experiment. A costing analysis was performed to quantify the financial value of producing oxygen at the lunar surface (ISRU) for a lunar outpost versus the cost of transporting the oxygen from earth-to-moon. A second assessment will be performed to provide sufficient design and analysis to develop system definition, potential project team, and project schedule and budget, and to determine mass, power, and volume estimates. A brief summary of the costing assessment and Pre-Phase A study will be presented.