Intelligent Self-Leveling and Nodal Docking System (ISLANDS)

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Summary: A general purpose landing platform and charging station for VTOL UAV’s

Description: The Intelligent Self-Leveling and Nodal Docking System (ISLANDS) is a docking platform to be used for landing and take-off of unmanned helicopters and VTOL aircraft. The ISLANDS are designed to serve as solar-powered recharging stations and data collection relay points, which can provide for increases in VTOL payload and mission duration. Strategically-placed ISLANDS can double flight mission time by providing a charging station and eliminating the need for reserve energy for a return flight. ISLANDS can be mounted on stationary locations or on mobile platforms, such as ground or sea-surface vehicles, and they can provide a take-off/landing platform within 5° of level on a surface up to 25° off of level. The ISLANDS design can be scaled up or down to accommodate helicopters of up to 150kg maximum take-off weight.

Advantages of this Invention:

- Increased range and endurance for unmanned helicopters
- Ability to land, recharge, and take off from remote locations, reducing frequency of return/retrieval

Potential Areas of Application:

- Military or civilian use
- Any applications requiring “eyes in the sky” capabilities

Stage of Development: First full prototype completed in August 2010

DU Log Number: #215

Intellectual Property Status: Notice of Allowance Received

Opportunity: We are seeking an investor or strategic partner to license this invention.

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