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## ROBOTIC MAINTENANCE AND BUILDING IN NEW LOGISTICS FOR SPACE

**Abstract**

Notion Robotics Lab plans to launch a repair ship by the end of 2024 under a program called Robotic Servicing of Geosynchronous Spacecraft. Payload would include a pair of robotic arms and several tools. It would be capable of inspecting satellites in geosynchronous orbits, making orbital adjustment and installing new satellite components. To demonstrate the ability to dock with refuel and reposition commercial satellites, extending their operations and eventually providing a means of reducing space junk it will be equipped with a “low-risk” mechanical docking system designed to capture and attach to satellite components. Once docked, the maintenance ship controls the attitude and orbit of the combined vehicle stack. Notion Robotics Lab will look for collaboration with space agencies to design and develop new infrastructure for refueling and repair ship is designed for multiple docking and un-docking to provide up to 15 years of satellite maintenance and also aged satellite. The entire advanced systems would be developed and plans to fleet of servicing vehicles to help extend the life of satellite via spacecraft inspections while changing orbital inclinations. Notion Robotics Lab would also launch its new In-Space Logistics Services for both Government and Commercial Customers and would provide Robotic Maintenance in space. Keywords: Robotic Servicing, Payload, Docking System, Robotic Maintenance,