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COMBINED LAUNCH SYSTEMA MODIFICATION TO THE ROCKOON LAUNCHING CONCEPT  
FOR A NEW APPLICATION TO REDUCE THE LAUNCH COSTS FOR MICRO (CUBE)  
SATELLITES AND DEBRIS' HUNTING PROBES.

**Abstract**

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This paper introduces a simple, cheap, reliable and conventional concept for launching Micro-Scaled Satellites, To provide the students and young researchers the chance to launch their own projects and experiments and see it actually functioning in space through the simplicity of launch procedure, mission tracking and systems engineering, The main theme for this project is to serve both educational and commercial sides of space exploration using the scientific bases and experiments of Control and Aerodynamics on lighter than air dirigibles, Rocket Propulsion and Flight dynamics stability to increase the efficiency of all systems and decrease both complexity and cost by integrating simple designed systems and fine tuning of their objectives to reach the desired mission aspects, also the variety of missions the Combined Launch System could be used in, besides lifting the Micro satellites into orbits debris hunting which results to be an essential threat to most of the space related projects nowadays, in this paper also the innovations on the propulsive systems and orbital mechanics introduced to increase the lifetime and capabilities of a cube satellite or a small space probe for hunting and detecting debris, allowing more objectives and higher level of missions to be performed using them.