## Abstract Submitted for the TS4CF08 Meeting of The American Physical Society

High Altitude Ballooning and Site Selection JOHN METCALF, WSU Physics Dept., HARBOR TEAM¹ — High altitude ballooning provides a near-space platform for amateur research projects in science and engineering. This venue allows new experiments, otherwise not conducted from costs or lack of transportation, from WSU and surrounding areas to be flown into the upper atmosphere. A highly skilled and motivated group of scientist and engineering students from WSU have contrived its own high altitude balloon to lift payload capsules filled with experiments and tracking equipment up to 120,000 feet where it then bursts and payload capsules are parachuted into a landing zone. Launch site selection is based upon the safety of those that come within the balloons projected flight path and terrain accessibility from the launch and landing zones. Restricted ground and airspace, mountainous regions, lakes and rivers, and densely populated or high air traffic areas were obstacles to be avoided. Computer flight simulations and region analysis show that there are several viable launch and recovery sites in Utah as well as SE Idaho, SW Wyoming, and NW Colorado.

<sup>1</sup>High Altitude Reconnaissance Balloon for Outreach and Research

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