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AN INTERNATIONAL INTERCOLLEGIATE COLLABORATION FOR DEVELOPMENT OF
EDUCATIONAL LAUNCH VEHICLES

Abstract

A joint university program for increasing launch opportunities for cubesats and small satellites is proposed. Preliminary mission analyses figured out that a small launch vehicle with a gross mass of 4000 kg would have a payload capacity of approximately 10 kg into a low earth orbit with an altitude of 200 km. It is expected that the launch price could be far less expensive than the current one with funds from each university joined in the program, each government, or UN. Details such as a master schedule, development processes were defined, and the participant universities made a viable plan to attempt the first test flight to space by 2022. This international collaborative program for the purposes of education and research will not only be able to provide students with hands-on working experiences, but also create an easier way getting into space as well as public interest in space exploration.