

BUSINESS INNOVATION SYMPOSIUM (E6)

Entrepreneurship and Investment for Innovations in Commercial Space Access Activities (1)

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LOW COST SOUNDING BALLOONS: COMMERCIAL AND ACADEMIC APPLICATIONS

Abstract

Sounding balloons are nowadays used for several experimental, academic and commercial purposes. In the academic field, they are used to carry out experiments such as pollution analysis or Earth observation, by recording videos or taking pictures from the stratosphere. There is also an ongoing project for creating a international sounding balloon network to share data, infrastructure and human resources for the benefit of the academic society. A lack of commercial applications usage for sounding balloons has been detected. These devices represent a powerful tool in several professional fields, such as the weather predictions, eventual telecommunications coverage or surveillance among others. There are currently few specific companies that commercialize this type of technology and the customers are usually armies or powerful companies since the cost of these products is very high. Most of academic institutions, such as schools and several faculties cannot afford the expenses of buying and maintaining a sounding balloon. However, a group of students are working in a project that will lead into an Internet low cost sounding balloons company. This innovation system will lead into a more generalized market that will reach to academic sectors, which have already shown their interest in having sounding balloons for student experiments testing or Earth observation. It will also give the opportunity to the third world scholars to experiment the physic and chemical interactions at 40Km height. Moreover, the commercial applications for companies will be wider, as they can be used for local studies of the atmosphere and radiation, surveillance, fire prevention or climate change studies. This paper will analyze the commercial and academic opportunities that the low cost balloons can bring to potential investors and customers. It will also analyze the current legal situation concerning to the sounding balloons usage in different countries.