

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

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SSC STUDENT ROCKETRY AND BALLOONING - EXPANDING THE VIEW

Abstract

SSC has a long heritage of educating students since the 1990s in the areas of suborbital flights and balloons through a multitude of projects and the REXUS/BEXUS programme. SSC has during this time seen the immense benefit of these projects and programmes have had for the European space community. Currently, SSC is investigating the possibilities of expanding educational activities to new countries and areas that previously have not been involved in space sciences through rocketry and ballooning. These countries see the technological, environmental, and economic benefits of a space presence but do not currently have the required capabilities. This expanded program would select student experiments onboard a suborbital rocket or balloon flight locally in the host nation or at Esrange Space Center in Sweden. It could either be a single experiment sharing the flight with other experiments or a dedicated flight for student experiments. The goal of the activity is to foster, educate, and train a young generation of space engineers and scientists to become the engineers and scientist of tomorrow leading the development of future space endeavors and scientific discoveries. Suborbital rockets and balloons are ideal for learning and training young people in all the essential skills required for larger space project, however in a smaller, confined and well defined project within a reasonable budget and time frame. The aim is also to enhance and expand the space related capabilities and knowledge in the host nation. This paper will expand on the topic of SSC assisting in setting up and operating student programs. It will also elaborate on the possibility to offer suborbital flight programs and stratospheric balloon programs together with UNOOSA for the benefit of the international space community.