## SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

On Track - Undergraduate Space Education (3)

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## BOLIVIA, FROM WHAT WE KNOW TO WHAT WE HAVE

## Abstract

It has been questioned the vision of the Bolivian Agency, which considered that operating a satellite was enough of a mission for a Space Agency whereas it has been considered that the Space Agency should go beyond, towards having a national space program in the long term.

This paper presents an initiative focused on creating and making activities and impacts happen, rather than only questioning the vision and structure of the existing projects and organizations.

It has been understood that education is a force to shape reality, Bolivia, at this point of its technological development cannot afford to have an aerospace industry, it does not have universities that work/research on this field, the field itself is unknown for the general public, even though Bolivia has launched a satellite.

Last year a couple of departments on a university were approached and asked "what they were good at", some of the answer were communications, electronics, sensors, control theories, taking that information in account a proposal was made for those departments.

Research projects were made from these two ingredients a) what the department at the university was good at b) Which subsystems were similar on a nanosatellite, drone and spacecraft at their first stages and had the potential to grow and became a working subsystem for a specific project.

The projects were presented to the university and it was agreed to have students working on those, they will receive a scholarship on the university once they show results, and those results will be used as start points for new projects. Bolivian universities lack experiences on the aerospace field, but have experiences in related fields that can complete themselves in order to make a new field.

From what Bolivia already has projects in different fields can be done, to make them converge alliances with the INPE(Instituto Nacional de Pesquisas Espaciais) and Kyutech University are the first steps aiming the creation of the aerospace career one in five years.

A native nanosatellite project, which is part of a program proposal, will be built during the two first years of the program, brick by brick will let the university not only to create the career but also the environment(laboratories, experts, bibliography, etc.).

As it was said before, questioning existing organization is healthy, but getting closer to them, learning what they have and going from there to where we all want is even healthier.