

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
On Track - Undergraduate Space Education (3)

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THE ROLES OF A STUDENT ROCKET CLUB IN THE SPACE EDUCATION AT NORTHWESTERN
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Abstract

The NPU Experiment Rocket Club (NERC) is a student technical club at Northwestern Polytechnical University, China. It was initiatively found by the author and several students in 2015. There are currently 84 members in the club. Most members are undergraduate students, but there are also a few Master students and young staffs of the university. The club is managed by the students, the job of staffs, such as engineers and professors, is only to look sponsors for the club and provide trainings.

The activities in this club are mainly related to the technologies of small rockets. The primary objectives of the club are to reinforce the theories learned in the classroom, train engineering skills for the students, develop the interests of space technologies for the students of other schools and encourage creativities of the students.

This club is research-oriented. Usually, 10-15 students work as a team for one project. The current projects are about model rocket, controlled rocket and turbojet engine. During the developing in the last year, the students also set several groups to deal with daily affairs, such as “media group”, “leading group” and “human source group”. The club also assist the university to organize activities, the first Space Day of China and Small Rocket workshop etc.

It is found that the club has greatly encouraged the creativities of the students. They invented a small solid motor with metal 3D printer, a mobile rocket launch pad and a complex controlled rocket, which were unbelievable before. In this paper, the objectives and running of the club will be described in detail. Several projects are presented. The planning of the club is also discussed.