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CENTRE SPATIAL UNIVERSITAIRE MONTPELLIER-NIMES

CELESTA CUBESAT QUALIFCATION TEST

1. Background

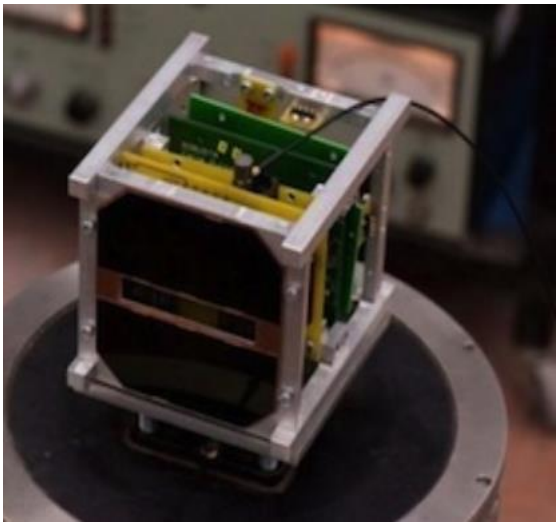
CELESTA (CERN Latch-up Experiment Student Satellite) is a CubeSat project, developed in collaboration by the CERN and the University of Montpellier in the framework of a collaboration agreement defined and signed in 2015. The project aims at a launch in 2018 and successfully passed a preliminary review early this summer.

In the Frame of CELESTA an engineering model is built and the software is coded. Later the flight model will undergo many different environmental tests. At the beginning and in the end of the test campaign, it is important to perform a "Mission Test" with the ground segment to qualify the satellite for flight.

2. Internship Objectives

- Perform a small bibliographic research on the specific aspect of satellite design, assembly and verification.
- Read and understand the mission and satellite documentation.
- With the help of other students and engineers, defined the Mission test procedure objectives.
- Write a test plan to describe the test set-up.
- Develop and write the test procedure. The procedure will be developed and tested on the CELESTA Engineering Model.
- If the results are good, it will be possible to perform it on the flight model

- If time and student level allow, it will be possible to start the development of the test to be performed during the Thermal Vacuum Cycling which aim at validating the overall system design performance under temperature.



Internship Condition

- The internship will be of 6 months
- The internship will take place in Montpellier
- A report shall be written to document the work