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ACTIVITIES (D5)

Safety and quality: "SUCCESS" is the goal (1)

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SUGGESTED ASPECTS FOR IMPLEMENTATION OF RISK MANAGEMENT IN THE FEI'S
MICROGRAVITY PROJECTS.

Abstract

Giving continuity to a study exploiting risk mitigation methodologies in order to improve the Centro Universitário FEI (FEI)'s microgravity experiments management, the present article intends to suggest an adapted model for risk management in futures microgravity projects at FEI. Based on FEI's own characteristics, the idea is to suggest a kind of management - feasible to be followed by different teams of its researchers and students - to be implemented in its multi-departmental projects, so that each team could develop its project taking care of the project's risks aspects based on a unified process, so that it may contribute to obtain better management results. Strategically thinking to further open its horizon of knowledge, the Centre has been present right from the beginning of the Microgravity Program of the Brazilian Space Agency (AEB) in 2002 (Cumã Mission), developing microgravity experiments for national sounding rockets and the International Space Station (ISS). As a matter of fact, its involvement in the aerospace field is previous to the AEB Microgravity Program, and started when they sent experiments on the space shuttle STS-107 (Columbia mission, 2003), and also on the sounding rocket missions São Marcos (1999) and Lençóis Maranhenses (2000). From mission to mission different scenarios appeared to the project management facing the researchers with a set of occurrences in a comprehensive amount of uncertainties that face the manager skills to deal with, not only regarding the experiment development itself, but also during the experiment launching mission. This paper intends to suggest the implementation of a basic risk management to be followed for the team leaders who, most of the time, are not familiar with some of these techniques. So that it may be possible to plan the risk management of the project by identifying risks, analyzing them, and elaborate some actions to be taken for the elective risks in order to have the best control of the project. This article is a particular case study of a broader survey that is being elaborated in the dissertation one of the authors', at the National Institute for Space Research, at São José dos Campos, Brazil.