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A COL-CC OVERVIEW OF INCREMENT 35 AND 36

Abstract

The Columbus laboratory, a European contribution to the International Space Station (ISS) through European Space Agency, is a multipurpose science laboratory facilitating multifaceted research in a microgravity environment. It is controlled by Columbus Control Centre (Col-CC) located near Munich in Germany.

In order to properly manage the operations onboard the ISS, these operations are prepared and planned for a well-defined time scale called expedition/increment. This paper discusses the preparation, planning and execution of activities under Col-CC responsibility in framework of Increment 35/36. During these increments, many critical tasks such as Biolab Maintenance, Geoflow and FASES operations in Fluid Science Laboratory (FSL), Columbus Thermal Control System troubleshooting with Water Pump and On Off Valve Remove and Replace were performed. Presence of an ESA crew member during Increment 36 was also a major highlight. In the end, most of the ESA objectives were successfully accomplished in accordance with the requirements as identified in the relevant Increment Requirements Document for these increments.

This paper would briefly summarize all such major activities along with insight into key challenges, recovery actions and lesson learned during the execution of Increment 35-36 from the COL-CC Flight Control Team perspective.