

HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3)
Sustainable Operation of the ISS - Joint Session of the Human Space Endeavours and Space Operations
Symposia (4-B6.5)

Author: Dr. Dieter Sabath
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, dieter.sabath@dlr.de

Mr. Dirk Schulze-Varnholt
Airbus DS GmbH, Germany, Dirk.Schulze-Varnholt@airbus.com

Mr. Gerd Söllner
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, gerd.soellner@dlr.de

DEVELOPMENT AND IMPLEMENTATION OF A NEW COLUMBUS OPERATIONS SETUP

Abstract

After four years of continuous Columbus operations since February 2008 and the end of the Shuttle era in July 2011 the operations concept of ISS and also Columbus has to be partly reshuffled. Despite the last years when tool upgrades and hardware renewals were in the focus of the team now a reorganisation of the Flight Control Team itself has to be started.

In parallel to the ongoing operations work which has to ensure a running Columbus module with minimum impact, the FCT has developed a new setup of the on-console and off-console team. This is partly driven by a growing efficiency of the FCT due to their experience on console but mainly to ensure the feasibility and affordability of the project during the long-term operations period until at least 2020. The year 2012 is a pure preparation year laying the basis for the changes to come in the years after. The first implementation of the new setup on console is planned for 2013. Nevertheless the new concept will be full established in 2015, only. Due to the reduced resources foreseen in the new concept there will be a lot of influences on the performance of the flight control team and on how operations is done at Col-CC when the new concept is implemented. Nevertheless the necessary tasks of the Col-CC FCT will be performed during transition and after the final implementation of the concept.

Besides this big preparation work to be done in 2012 also the normal operations work has been performed with rack tilting, exchange of hardware, a major software upgrade of the Columbus module and support of the payload operations in Columbus.

The paper will give an overview of the achievements and highlights of the last year and concentrate major change in the setup of the Columbus FCT which is one of the preparatory tasks for the planned ISS operations until 2020.