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HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Governmental Human Spaceflight Programs (Overview) (1)

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CANADA AND THE INTERNATIONAL SPACE STATION PROGRAM: OVERVIEW AND STATUS SINCE IAC 2015

Abstract

Since meeting in Jerusalem for the IAC 2015, the Canadian Space Station Program has been busy supporting the role of Canada's Mobile Servicing System (MSS) in the maintenance and utilization of the ISS. This paper focuses on the milestones reached and various activities that have occurred in the past twelve months.

The MSS is keeping pace with the steady stream of free flying cargo vehicles which must be captured and berthed by Canadarm2. In addition to the free flyer traffic, the MSS also continues to expand its capability to support ISS utilization and robotic maintenance. This year, this has included preparation for the vital and imminent replacement of the first set of ISS batteries.

Utilization of the ISS as an on-orbit research platform continued with Canada funding several experiments targeting the identification, characterization and mitigation of the risks of long-duration human spaceflight. This paper provides a summary of the Canadian utilization activities. On the human spaceflight front, the CSA is looking ahead to its third long duration mission to the ISS.

Along with other ISS partners, CSA is working towards supporting space station operations as the program's end date is extended to 2024, in order to continue to benefit from this unique space based laboratory. In addition, on-going technology development and research will use ISS assets to build capabilities further enabling future exploration initiatives.