HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3) Overview Session (Present and Near-Term Human Space Flight Programmes) (1)

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CANADA AND THE INTERNATIONAL SPACE STATION PROGRAM: OVERVIEW AND STATUS SINCE IAC 2011

Abstract

Since meeting in South Africa for the IAC 2011, the Mobile Servicing System, using Candarm2, will have captured and berthed the third Japanese H-II Transfer Vehicle (HTV-3). In addition, Canadarm2 will have also captured and berthed the first commercial US transportation vehicle, the SpaceX Dragon, on its maiden voyage to the ISS with its cargo. The Mobile Servicing Station (MSS) will have also performed a variety of station-keeping activities including EVA support activities.

Dextre was declared fully commissioned and intense activities took place to develop and execute operations for the Robotics Refuelling Mission payload developed by Goddard Space Flight Center. The operations to be performed on this payload were to simulate those that would be required to refuel a satellite on-orbit. This paper focuses on the milestones reached and various activities that have occurred in the past twelve months.

On the human spaceflight front, Chris Hadfield is nearing the completion of his training for his six month stay on the ISS scheduled to begin in November 2012. Chris will also act as the ISS Commander for Increment 35.

Utilization of the ISS resources continued with Canadian participation in several experiments carried out on-board the ISS. The paper will provide a summary of the Canadian utilization activities.

CSA continues to expand its abilities for utilization and robotic maintenance. Along with other ISS partners, CSA is working towards the goal of supporting space station operations to 2020 in order to continue to benefit from having a laboratory in space.