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ISS UTILISATION BY CSA: NOW AND IN THE FUTURE

Abstract

The space environment is hostile to life making human presence in space an incredible challenge that stretches our boundaries of knowledge and technology. The International Space Station (ISS) is the only place where humans can live for extended periods above the atmosphere. It is truly the first step in human Space Exploration. The ISS was originally conceived as an international laboratory for research in Life and Physical Sciences in space, but it is also a unique facility for technology development and space medicine and is an inspiration to people of what can be achieved by working together in Science and Technology. Scientific data and new technologies generated from the ISS research will not only reduce risks of future space missions but will also contribute to improved life on Earth through improved health care, advanced materials and technologies, improved industrial processes and the list goes on. As a result of Canada's contribution of the Canadarm 2 on the ISS, Canada joins the four other partners (Europe, Japan, the United States of America and Russia) of the ISS. The CSA will use the ISS as a stepping stone for exploration. The CSA is also looking to join forces with other Canadian organizations (OGDs, academia, industry) to ensure that the ISS is fully exploited for the benefit of all Canadians. It is imperative that Canada maximizes the impact of its contribution to the ISS to enable human Space Exploration but also to improve life for Canadians.