

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

Author: Dr. Julie A. Robinson

National Aeronautics and Space Administration (NASA), Johnson Space Center, United States,  
julie.a.robinson@nasa.gov

Ms. Tracy Thumm

Barrios Technology, Inc., United States, tracy.thumm-1@nasa.gov

Dr. Perry Johnson-Green

Canadian Space Agency, Canada, perry.johnson-green@asc-csa.gc.ca

Dr. George Karabadzak

TSNIIMASH, Russian Federation, gfk@tsniimash.ru

Dr. Tai Nakamura

Japan Aerospace Exploration Agency (JAXA), Japan, nakamura.tai@jaxa.jp

Mr. Sabbagh Jean

Italian Space Agency (ASI), Italy, jean.sabbagh@asi.it

Dr. Igor V. Sorokin

S.P. Korolev Rocket and Space Corporation Energia, Russian Federation, igor.v.sorokin@gmail.com

Dr. Martin Zell

European Space Agency (ESA), The Netherlands, martin.zell@esa.int

INTERNATIONAL SPACE STATION RESEARCH FOR THE NEXT DECADE: INTERNATIONAL  
COORDINATION AND RESEARCH ACCOMPLISHMENTS

**Abstract**

During 2011, the International Space Station reached an important milestone in the completion of assembly and the shift to the focus on a full and continuous utilization mission in space. The ISS partnership itself has also met a milestone in the coordination and cooperation of utilization activities including research, technology development and education. We plan and track all ISS utilization activities jointly and have structures in place to cooperate on common goals by sharing ISS assets and resources, and extend the impacts and efficiency of utilization activities. The basic utilization areas on the ISS include research, technology development and testing, and education/outreach. Research can be categorized as applied research for future exploration, basic research taking advantage of the microgravity and open space environment, and Industrial RD / commercial research focused at industrial product development and improvement. Technology development activities range from testing of new spacecraft systems and materials to the use of ISS as an analogue for future exploration missions to destinations beyond Earth orbit. This presentation, made jointly by all ISS international partners, will highlight the ways that international cooperation in all of these areas is achieved, and the overall accomplishments that have come as well as future perspectives from the cooperation. Recently, the partnership has made special efforts to increase the coordination and impact of ISS utilization that has humanitarian benefits. In this context the paper will highlight tentative ISS utilization developments in the areas of Earth remote sensing, medical technology transfer, and education/outreach.