

26th SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)  
National Space Policies and Programmes, and Regional Cooperation (1)

Author: Dr. Giuseppe Reibaldi  
International Academy of Astronautics (IAA), France

Dr. Ciro Arevalo Yepes  
The World Economic Forum's Global Agenda Council on Space Security, Colombia

LATIN AMERICA AND CARIBBEAN PARTICIPATION IN HUMAN SPACEFLIGHT ACTIVITIES

**Abstract**

Human Spaceflight activities are being conducted for the benefit of Mankind; however, they currently involve only a limited number of space-faring nations. Human Spaceflight should be a global endeavour involving as many countries as possible, as indicated in the IAA Human Spaceflight Study Group Report presented at the IAA Head of Space Agencies Summit in November 2010. As stated by most of the Heads of space agencies, today's human spaceflight challenge is to find the appropriate way to involve emerging space countries in new cooperation programs.

The rise of emerging economies creates a need for stronger global commitments to international cooperation. The establishment of a more robust global governance calls for an empowered interaction between space faring nations and developing countries. A new concept of cooperative interactive platforms with global implication seems necessary. Within this new perspective of regional and inter-regional cooperation major transversal undertakings like Human Spaceflight are suited to close the technological gap between this group of nations.

Nations of the Latin America and Caribbean region are increasing users of space assets which are necessary to face major constraints in their socio-economical development. In that regard they are raising the level of investment in Research and Development within their national central planification structures. However the difference in investment between the countries is striking. Partly due to their dependency on natural resources, the public perception on science and technology is still not important and the number of scientists and engineers is increasing but at a low pace. Participation in Human Spaceflight activities could provide an important boost to all the issues identified.

This paper will present specific activities that could involve Latin America and Caribbean countries in Human Spaceflight. The rationale for embarking in human spaceflight activity for a developing country will be presented such as access to enabling technologies, nanotechnology, biotechnology, medical and biological research boost, building scientific, technical and educational capacities with particular emphasis on medicine, biology and nutrition expertise. Human Spaceflight appeals to the general public can play an important role in improving the public perception of science and technology. The creation or reinforcement of their science and technological clusters could reinforce national pride and the stimulation of future generations will be also key driving factors.

The involvement in Human Spaceflight activities of Latin America and Caribbean countries will be a powerful symbol of hope for the 21st century for all developing world.