

## "Space Renaissance Italia and Its Strategic Plan"

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## --- ABSTRACT ---

A school of thought states that the present age is characterized by low cultural vivacity, probably due to the exceeding role assigned to economy. Our age is now compared with the more critical Middle Age, envisaging the need of a recovery period similar to the XVI century Renaissance when, thanks to the enlightened action of families as the Florence' de' Medici, an age of vigorous growth was developed: arts registered an extraordinary vitality, culture regained the essential principles of the classical Greek philosophy, seeding the modern science, with precursors like Leonardo da Vinci, Michelangelo Buonarroti and later Nicolò Copernico, Galileo Galilei.

After the growth due to industrialization and the increase of world population to some seven billions, the effects of the age of Enlightenment are over since its main ideological limit has been reached: the wrong assumption that the world is limited to the planet Earth. Today, in the XXI Century, we need a new vision of the world, a new renaissance, a Space Renaissance: the world extends far beyond planet Earth! In XX Century the space era moved its first steps thanks to scientists and philosophers as Konstantin Tsiolkovsky, Krafft Ehricke, Gerard O'Neill and other ones. They in fact generated the school of thought that we define Astronautical Humanism. The ideas they transmitted to posterity allow us to benefit of a period characterized by great scientific and technological progress. This period lacks only of resources and a unifying vision in order to succeed transforming the present world, as the Renaissance and the age of Enlightenment did with the Old World.

On 22 March 2013 the Chapter Italia of Space Renaissance International has been founded, with the basic idea to foster the above mentioned association vision, by designing and implementing a national program. Primarily devoted to Space Tourism, the essential items of such program include:

- dissemination of the association culture and vision by means of a general public outreach project incorporating congresses, workshops, concerts, exhibitions, movies
- a youth oriented education project, targeting primary and high schools as well as master, doctorate and post-doc students
- facilitate the general public access to parabolic flights as first steps towards higher jumps to space tourism trips
- promote the development of a national sub-orbital flight project
- stimulate commercial businesses in all of the above mentioned development lines.

This paper will illustrate both the vision and the SR Italia Strategic Plan.



## --- SUNTO BIOGRAFICO DELL'AUTORE ---

CEO of TRANS-TECH, an innovative startup, he devoted more than thirty years to aerospace research. He got a M.Sc. in Aeronautical Eng. from University of Naples and a Ph.D. in Aerospace Eng. from University of Rome, working on surface tension driven Marangoni Flows with experiments carried out on board Shuttle/Spacelab missions.

In 1987 he joined CIRA (Italian Aerospace Research Center) where he worked for some 25 years, dealing with space research, technology and systems. Among others, he was responsible of: Space Activities; International Relations; Strategic Marketing; Aerothermodynamics Dept.; Program Manager of the Hypersonics/Hermes activities, including design leadership of the 70 MW arc-heated Plasma Wind Tunnel "SCIROCCO". He was manager of CIRA with responsibility of Space Systems, Space Labs & Facilities, Space Programs Management, and was Program Manager of the Unmanned Space Vehicles (USV) program, including Drop Trans- and Supersonic Flight Tests campaigns (2007 and 2010).

Member of the International Academy of Astronautics (IAA), and of many committees of the International Astronautical Federation (IAF). Was Italian delegate of the Launchers Programme Board of ESA.

He is author of more than 110 scientific papers of international relevance.