



Title: "ATMOSPHERIC RE-ENTRY"		Date: February 19th 2013	
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What is	This seminar aims to explore the atmospheric re-entry systems, features and technological frontiers in the evolving international scenario. Students will understand the reasons of the choices made in the past and scenarios in the coming decades. In addition, it provides key elements to understand the positioning of Europe and Italy in the development of such domain, and how to look at space with a more commercial approach. The seminar also provides key elements for understanding the evolutionary path, systems theory and technologies that are increasingly approaching the traditional aviation to space. Cost reducing solutions, that will make space accessible and affordable for commercial enterprises, are discussed as well, during the seminar. At the operational level, as is well known, the atmospheric re-entry is a very critical phase and is associated with high risk. The seminar will discuss some significant cases, with a focus on the accident at the end of the Space Shuttle Columbia mission STS-107 on 1 February 2003, with the aim of understanding the causes of accidents, and survey the ongoing activities targeted to develop valid countermeasures..
For who	Students of Aerospace Engineering Universities, young graduates, entrepreneurs, investors.
Type	Classroom-type instruction and interaction.
Duration	8 hours (1 day) - introduction 24 hours (3 days) - advanced stage. More extended course, to be defined according to the Customer's needs.
Where	The seminar can be held at the customer premises, with logistics supplied by the customer, or it can be organized by ASE LTD, grouping together several attendees having similar requirements and profile.
Benefits	At the end of the seminar, according to the chosen level of detail, students will be able to: <ul style="list-style-type: none"> - know the main international atmospheric reentry programs; - understanding the rationales of the technical choices in the referred scenarios; - defining and sizing new systems of return, even on a cooperative basis; - identify enabling technologies, defining the primary goals and establishing the criteria for assessment of TRL (Technology Readiness Level). Interest profiles: propensity to innovation; curiosity and hunger for knowledge, a desire to look beyond own and mankind borders; motivation to search; interest in looking at the problem from different points of view, a systemic multidisciplinary approach; interest in personal growth and professional training; high-profile career paths, interest in specialized courses on the subject; ability to develop graduation works with clear international significance in terms of innovation.
Deliverables	Electronic copy of the materials used during the seminar: slides, documents, materials produced during exercises.
Teachers	The lead trainer, Dr. Rino Russo , has a PhD in aerospace engineering and specializes in fluid dynamics, hypersonics, re-entry and space transportation. He has over 25 years of experience with unmanned space systems. He is a lecturer for the Masters Degree in Space Transportation Systems and Satellites and Space Platforms at the University La Sapienza, Rome. For most part of his professional career, he served as manager and head of the space department at CIRA (Centro Italiano Ricerche Aerospaziali). In particular, he served as head of President's Office for Institutional Relations Development, Head of the Space System Div, Head of Space Labs & Facilities Division including the 70MW Plasma Wind Tunnel SCIROCCO, Head of the Space Programs Management Division, Program Manager of the USV (Unmanned Space Vehicles Program and Director of USV Drop Trans- and Supersonic Flight Tests campaigns. Gennaro -- aimed by a strong passion for astronautics -- holds a great attitude to transmit his huge know-how, both technical and philosophical, to young and less young people. Please also see: LinkedIn: http://www.linkedin.com/pub/gennaro-russo/b/680/44
Registration	E-mail info@spacerenaissance.org – cell. +39.335.8244435



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Send us [your manifestation of interest for this seminar](#), you will be re-contacted, in order to:

- a) join an already scheduled session, *or*
- b) keep you in the list for a not yet scheduled session, *or*
- c) organize a session at your premises.

Please also specify:

- the seminar code(s) you are interested to:
- the number of participants to the class(es):
- skill and experience of the participants:
- your goals and expected benefits:
- where do you want the class(es) to be held:
- tell us your preferred planning: one day units, dates to be negotiated