

## Organizing Committee

Daniel Hernandez  
Symposium Chair  
CNES

telephone: +33 5 61 27 4017  
telefax: +33 5 61 28 1870

email: daniel.hernandez@cnes.fr

Luca Maresi  
Symposium Chair  
ESA/ESTEC

telephone: +31 71 565 4968  
telefax: +31 71 565 5430

email: luca.maresi@esa.int

Frederic Teston

Technical Committee Chair  
ESA/ESTEC

telephone: +31 71 56 5088  
telefax: +31 71 565 6501

email: frederic.teston@esa.int

### For logistical matters:

ESA Conference Bureau

PO Box 299, 2200 AG Noordwijk-NL

Telephone: +31 71 5655005

Telefax: +31 71 5655658

email: esa.conference.bureau@esa.int

web address: <http://conferences.esa.int>

## Technical Committee

The Symposium is jointly organized by ESA and CNES in cooperation with AFRL, DLR and the Utah State University.

The symposium is supported by many other international organisations including IAF, AIAA, Supaéro, BNSC, ASI, NRL, USAF, JAXA, and CSA.

Erin Beck (St. Luis University), Michel Bousquet (Supaéro), Marie Anne Clair (CNES), Alex Da Silva-Curiel (SSTL), Thom Davis (AFRL), Rachel Drummond (Catholic University of Leuven), Benedicte Escudier (Supaero), Barrett Flake (USAF), Flemming Hansen (DSRI), Keiichi Hirako (JAXA), Bianca Hoersch (ESA), Mike Hurley (NRL), Patrick Jolley (USU/ATK), Stanley Kennedy (AIAA), Catherine Lambert (CNES), François Maroquène (Arianespace), Bob Meurer (USU/AIAA), Kent Miller (USAFOSR), Sias Mosert (Stellenbosch University), Darius Nikanpur (CSA), Pat Patterson (USU), Hans-peter Röser (Stuttgart University), Rainer Sandau (DLR), Francesco Svelto (ASI), Costantinos Stavriniadis (ESA), Alberto Tobias (ESA), Peter Wegner (AFRL).

### Sponsors:



Call for Papers

# The 4S Symposium

*Small  
Satellites  
Systems  
and  
Services*

### Co-sponsors:



UtahState  
UNIVERSITY



**Hilton Hotel  
Rhodes, Greece**

26-30 May 2008



## Small Satellite Systems and Services – The 4S Symposium

### About the 4S Symposium

The Small Satellites Systems and Services Symposium, the “4S Symposium”, is a biennial event that was first held in 1992. The 4S Symposium has a large international participation. Representatives from 25 nations attended the 4S Symposium of 2006. High standard contributions were presented covering all aspects of small satellite programmes such as flight experiences, mission definition, technologies, launches, ground segment and data exploitation. The 4S Symposium is a good occasion to present results to an international audience and to learn what’s happening worldwide in this field. Continuing its tradition of high quality, the symposium is an excellent working environment where technical sessions are complemented by opportunities to exchange ideas and opinions on technologies and utilization of small satellites. The quality of the contributions, mixed with the special atmosphere of the symposium, gives this event a unique taste.

### The Theme of 2008

The evolution of the global economy and the technical maturity of small satellites have opened a new era of space exploitation. Just considering how many nations have recently acquired space-faring capabilities manufacturing small satellites, it can be easily concluded that small satellites and low cost missions have spread space technologies very rapidly all over the world. More nations will soon acquire the economical resources and the know-how to deploy and operate space missions.

On the other side, countries with a long history in space have developed small satellites to explore different approaches to design and build satellites. In the last few years, small satellites built by space-faring nations have proven enough reliability to be used as commercial products, to complement traditional space programmes, and also to test in orbit new technologies. Furthermore, small satellites have been produced and sold to

emerging economies, showing that they are the door often used by newcomers to enter the club of space-faring nations. Small satellites seem to be the *trait d’union* between newcomers and established space industry. One of the objectives of the 4S Symposium of 2008 is to discuss what kind of benefits space systems can provide to emerging economies and how established space industries may use their know-how to enter these markets.

Recent activities have addressed development of technologies to quickly assemble and launch a satellite. These technologies are being developed to respond to short term needs or for complementing with small satellites an existing space asset that has some limitations. The capability of rapidly deploying small satellites is an asset to market space systems. At the same time, some of the technologies used on board satellites are subject to export restrictions, even in the case of small satellites. This has an influence on the worldwide trade of small satellite technologies and systems. It is important to understand what kinds of cooperation are now possible and how different regulations may in the future affect the overall equilibrium of the worldwide small satellite market.

### Programme

The programme will cover, as in the tradition of the Symposium, Mission and System Analysis, Applications such as: Earth Observation, Science, Telecommunication and Navigation, New Technologies, both at system level and sub-system or component level.

Contributions addressing the specific aspects of 2008, such as international cooperation, trade of small satellite systems and technologies, in-flight experiences and data exploitation, are highly welcome.

### Hardware Exhibit and Poster Session

The Symposium will be complemented with a technical exhibit to display hardware and posters throughout the duration of the Symposium.

### Venue

The Symposium will take place at the Hilton Hotel in Rhodes, the largest island of the Dodecanese Greek archipelago. The city of Rhodes is the largest inhabited medieval town in Europe. Layers upon layers of history are evident at every turn. Founded in 400BC, the foundations of the classical Greek city are to be seen at various points. Most striking, however, are the gothic buildings of the Crusader knights who settled in Rhodes in 1309. Turks conquered Rhodes in 1522 and remained in control until 1912. All these cultural influences are still palpable today in the fabric of this beautiful city, a cosmopolitan meeting point between East and West for two and a half millennia. Rhodes is also an island of warm sunshine, sandy beaches and charming villages.

The hotel is situated only a few kilometres from the island main city and from the airport. Rhodes is connected with four daily flights to Athens airport and to other international airports. Regular ferries travel to the other islands of the Dodecanese, as well as to nearby Turkey.

### Abstract Submission

Abstracts should be submitted via the Symposium website at:

<http://conferences.esa.int>  
(please select 4S Symposium)

Further information can be obtained from the ESA Conference Bureau ([esa.conference.bureau@esa.int](mailto:esa.conference.bureau@esa.int))

### Registration and Hotel Reservation

The conference registration fee is 750 €. Block bookings at a special rate have been made at the Hilton Hotel in Rhodes.

### Calendar of Events

Deadline for abstract submission	8 January 2008
Deadline for hotel reservation	15 April 2008
Conference dates	26-30 May 2008