

# 2012 Joint Conference

## Satellites in the Service of Humanity

September 24-27, 2012 - The Westin Ottawa - Ottawa, Canada

### 18<sup>th</sup> Ka - Announcement and Call for Papers

The 18th Ka and Broadband Communications, Navigation and Earth Observation Conference and the 30th AIAA International Communications Satellite Systems Conference (ICSSC), the two most influential technical conferences on satellite systems, will be held jointly in Ottawa, Canada, from 24 to 27 September 2012.

The 2012 Joint Conference theme is "*Satellites in the Service of Humanity*".

#### Objective of the 18th Ka Conference

The opening session of the last conference in Palermo featured again Giuliano Berretta talking about Ka Sat changing the Ka band dream of 2010 to the Ka band reality of 2011, a reality that was to be reinforced by Mark Dankberg announcing the success of Viasat I, but circumstances beyond his control did not allow it, since the Viasat launch was delayed until it October 19. We are thus eagerly anticipating the opening of next year's conference, where we can hear more about the reality of Ka Band and its usefulness to mankind. Yes, it is now a reality and one that is bringing new life to the communications satellite industry, the band that permits the **construction of satellites** with throughputs of 150 Gbps, that brings **high speed internet** beyond the reach of fiber, brings the **internet to airplanes** in the sky, and **broadband communications** to the battlefield and to disaster areas, as in the case of tsunami that befell Japan. But **high-speed communications** is only one aspect of the **satellite industry**.

Satellite Navigation has become more significant in our everyday life, with more accurate systems being built, more direct flight control systems being explored, and more and more people using it to get to their destinations. We expect to hear more about the progress of the Galileo program, which will complement the existing GPS.

Finally, **Earth Observation** has increased its accuracy, has seen new ways to obtain data, is helping to better understand our environment, and is used to assist in assessing and containing damage caused by natural disasters.

In conclusion, satellites have become indispensable tools to maintain and advance our lifestyles, whether they are the multi-ton long life communications **giants** or the **small, single purpose, experimental satellites** often launched together with the large ones.

Our hope is that this Conference contributes to the advancement of the state of the art and publicizes the contributions of satellites to the benefit of humanity.

To this end, we are soliciting papers in the following areas and, in the spirit of international cooperation, we invite the Space Agencies to join the Italian Space Agency in using this Conference to publicize their current accomplishments and future plans.

#### TELECOMMUNICATIONS

- Systems
- Applications
- Protocols
- Components
- Propagation

#### NAVIGATION

- Systems
- Applications
- Components

#### EARTH OBSERVATION

- Systems
- Applications
- Sensors

#### SPECIAL TOPICS

- Market Assessment
- Risk Management
- Legal & Insurance Issues