



**Communications Satellite Systems: A Look Back at the First 50 Years and Thoughts on the Next 50**  
Cleveland, Ohio, October 18 - 20, 2016

## 34<sup>th</sup> ICSSC Conference - Call for Papers

Since the late 1950's and the time of the Soviet Union's Sputnik I and the United States' Explorer I, many world countries have developed, launched and operated satellites changing the space landscape forever. From the time of these initial Earth observations of upper atmosphere density or Van Allen's discovery of the magnetic radiation belts around Earth to the present, the satellite industry has made significant advancements in highly sophisticated Earth sensing measurements, digital broadcast satellites, emerging constellations to provide global telecommunication services, expansion of the Internet into space, and contemplating human exploration beyond Earth's orbit.

The combined 34<sup>th</sup> **AIAA International Communications Satellite Systems Conference** and 22<sup>nd</sup> **Ka and Broadband Communications Conference** is the ideal venue to celebrate these early satellite systems accomplishments and discuss the challenges and discoveries required for the next 50 years. Come join this rich history and be a part of the future promise of extraordinary technological and human feats enabled by satellite capabilities.

This year's combined Conference will emphasize the satellite architectures, payloads, technologies, and systems required for the next 50 years of satellite and systems advancements.

The combined Conference is soliciting papers in all areas of activity covering the following satellite system topics:

- **Advanced satellite systems, services, and technologies**
- **High capacity broadband satellite systems, services, and technologies**
- **Advanced broadcasting satellite systems, services and technologies**
- **Next generation L/S/K-band GEO/MEO/LEO mobile satellite systems, services and technologies**
- **Hybrid satellite/terrestrial mobile systems**
- **Advanced data relay and backbone systems, services and technologies**
- **Dual-use satellite communication systems, services and technologies**
- **Satellite-aided localization systems, technologies and applications**
- **Search and rescue satellite systems, technologies and applications**
- **Satellite/terrestrial hybrid localization systems, technologies and applications**
- **Optical communications for planetary and interplanetary missions**
- **Communications protocols and networks**
- **Advances in satellite payload architectures and equipment**
- **Near Earth and deep space relay capability architectures**
- **Payload and ground segment technologies for Ka, Q/V and W-band**

- Flexible satellite resource allocation architectures, design tools and technologies
- High speed onboard processing and digital payload architecture and technologies
- Techniques and technologies for next generation satellite remote sensing high speed downlinks
- On-board navigation receivers for LEO/MEO and GEO satellites
- Satellite bus technologies
- Advances in Earth terminals and stations architectures and equipment
- Propagation and fading modelling and fading mitigation techniques
- Integration and interoperability of systems
- Autonomy and cognitive system technologies
- Effective support of interactivity via satellite
- Domestic security applications and architectures.

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**Information & Inquiries should be directed to:**

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