## **CHANGE LEADERS**



Mr. Tom Stroup, President
Satellite Industry Association (SIA),
Washington, USA

January 2024

- A big challenge facing the Satellite Industry is the growing demand for Spectrum and to ensure that regulators also change in tune with the market demands of the commercial Space Industy.
- India is a leader in the Launch Industry.
   Indian and American Companies can see more opportunities in Space Sustainability (refueling, mission extension, mapping, positioning and navigation and debris removal)
- Advice for Start Ups "Don't be enamored by your technology, make sure that there is a market that is ready and big enough to take your product.... many start-ups fail here"

#### The Gl bal Trade Driver

(An International Forum on Industry and Education)

## **Explore The Space**

(Promoting STEM Education & Space Exploration awareness in Schools & Colleges across Geographies)

Explore The Space is an "ISRO"
Registered Space Tutor



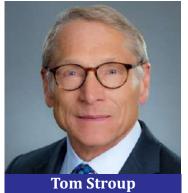
"Change Leaders", is a series of interviews by Explore The Space & The Global Trade Driver with leaders in business, academia, technology and government, across the world, whose actions and ideas have a positive and big impact in their field of work.

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#### **CHANGE LEADERS SERIES**

## An interview with Mr. Tom Stroup, President Satellite Industry Association (SIA), Washington, USA





As President of SIA, Tom is the trade association's lead advocate for regulatory and policy issues of critical importance to SIA's membership, including spectrum and licensing issues, defense and public safety matters, and export control and international trade issues. He also manages the day-to-day operations of SIA, including member communications, staff leadership and organization of SIA sponsored events. Tom became the president of SIA in December of 2014.

Prior to joining SIA, Tom was with Shared Spectrum Company (SSC), a leading developer of spectrum intelligence technologies, where he served as CEO. For

more than a decade, he served as the President of the Personal Communications Industry Association (PCIA). Previous to his position at SSC, he founded and ran several companies in the technology industry, including Columbia Spectrum Management, P-Com Network Services, CSM Wireless, and SquareLoop.

Tom holds a BS in Public Administration from the University of North Dakota. He is also a graduate of Georgetown University Law Center where he served as Editor of the Georgetown Law Journal.

Tom Stroup, in this very interesting interview with D. V. Venkatagiri, CEO, Explore The Space & The Global Trade Driver, presents his views on the opportunities & challenges for the American / global satellite industry.

## 1) As the President of SIA, what do you think has been your biggest achievement in the last ten years?

Over the past decade, there has been a giant leap in technological innovation in the satellite industry. Everything from satellite design, factory manufacturing, spacecraft and ground system capabilities, plus launch vehicle design and orbital capabilities of LEO, MEO and GEO satellites has increased satellite utility or functionality. In addition, the cost to design, manufacture and deploy space-based systems has decreased tremendously. Consequently, the sheer number of satellites now operating in Earth orbit has grown by thousands of spacecraft.

While SIA is not solely responsible for these tremendous achievements, we have worked diligently with policymakers in the United States to establish a regulatory environment that has enabled them to take place. By creating much greater awareness of the role satellites play in our daily lives and their impact on the U.S. economy, we've seen unprecedented support for the industry in Congress, the Federal Communications Commission, and throughout the Administration, including the White House, the Department of Commerce as well as numerous other branches of the government.





## 2) In your opinion, how is SIA different from other Industry Associations?

SIA is not only an advocate and representative of the domestic commercial satellite industry – but we also see ourselves as a collaborative relationship-builder with policymakers and those wide-ranging government agencies and commissions who govern the commercial space business. In the U.S. there are trade associations representing virtually every industry, but we are a broad-based

"Explore The Space" promotes STEM & Space Education and facilitates Industry Partnerships

Interview conducted by D.V. Venkatagiri CEO Explore The Space & The Global Trade Driver



 $association \ of those \ companies \ with \ an interest \ in \ promoting \ the \ U.S. \ satellite \ industry.$ 

## 3) Is SIA membership only for American Companies? Or do you have Member Companies from other parts of the World?

SIA focuses on the domestic U.S. satellite industry, so our members typically have a domestic presence in the U.S. market. That said, we do have members headquartered in other countries. Many set up U.S. subsidiaries to facilitate sales here, especially to the U.S. government, but that is not a requirement for affiliate membership in SIA.

## 4) Space Debris is going to be a big problem for our future generations. What is your policy or advocacy on managing the problem of Space Debris?

Several years ago, SIA established our Space Safety Principles to reflect SIA members' commitment to responsible space operations that ensure the long-term sustainability of the space domain. (They are available at the following link:

https://sia.org/policy/space-debris-mitigation-sustainability/) SIA continues to work with policymakers in the U.S. and to coordinate with other space associations to ensure space is sustainable for future generations since this is a global issue of importance to all in the space industry.



**International Space Station** 

#### 5) What is your opinion about the recent happenings in the Indian Space Sector and Space **Industry?**

India's launch industry is clearly one of the leaders in deployment of space-based assets and it serves a number of global and U.S. customers. Many SIA members have business relationships within the domestic Indian marketplace.

#### 6) What kind of business / commercial relationships do you foresee / want to work for between the Indian and the American Space **Industry?**

Because ours is a global industry, there are many areas for commercial relationships between Indian and American companies. One of the most obvious is to expand the coverage for those companies that do



Satellite's Role in Agriculture

not have global footprints, but also to provide distribution channels for customers in each other market. Beyond these and other business relationships, however, I am most hopeful we'll see companies working together on space sustainability.

#### 7) What are the opportunities and challenges before the rapidly growing Commercial **Space Industry?**

As I mentioned previously, technical innovation is one of the business cornerstones fueling the expansion of the satellite industry. This has and will continue to create new market opportunities. With all of the new entrants into the industry, however, we need to see the pie grow larger, not just fight over which slice each company gets. That is true whether we are talking about communications, remote sensing services, manufacturing, launch or any of the other sectors of the industry.

Of course, all of our services require adequate spectrum to continue to grow, so access to sufficient spectrum will be one of the biggest challenges we face. Therefore, a key factor will be for the regulatory regimes around the world to provide adequate global spectrum to support the continued current and future growth and innovation of the commercial space industry.

#### 8) What is that you want to achieve in SIA for its members or for the Industry in general ...in the next three years..?

I am hopeful that the World Radio Conference will address the global spectrum needs noted above, which will provide SIA an opportunity to continue to work with domestic policymakers to address our needs. The National Spectrum Policy just released in the U.S. is a good first step in that it noted the need for additional spectrum for the space industry. We've also seen several steps taken to streamline and expedite the licensing process in the U.S. and I am hopeful we will see continued efforts to recognize the need for regulators to change along with the growth of the industry. In addition, there remains much to be done to put in place a space situational awareness system now that the U.S. has established the entity responsible here. I am also hopeful that the many regulatory issues associated within space servicing, assembly and manufacturing are addressed within that time frame, as well as those needed for cislunar (between the Earth and moon) activities.

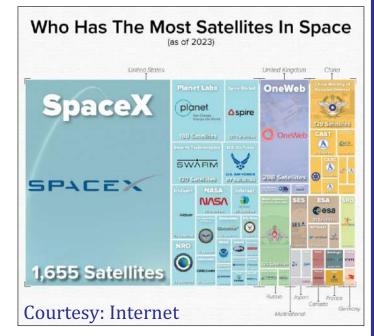
## 9) The Satellite Industry Report that you make is very popular. What kind of work and planning goes into making that report.?

SIA has been producing our State of the Satellite Industry Report for 25 years, so we have a lot of data gathered over that time. We try to ensure consistency in the data that we have collected but also to add categories to reflect how the industry has changed. Each year when we present the report to our members and policymakers we note suggestions they offer on what additional information would be helpful. We often will review suggested additions or changes with members of our Board of Directors to get their input, which will then be reviewed by BryceTech, the company responsible for collecting the data and preparing our report. Some of the recommendations have resulted in modifications to the core report, such as the addition of information on the changing industry dynamics and innovation in the industry. Another is the addition of a new section on space sustainability activities that will be included in future reports.

# 10) What is your advice for start-up companies in the Space Industry...What is the opportunity before them and where do many of them fail?

There is a tremendous amount of growth and innovation in the industry, which creates significant opportunities for entrepreneurs. The space industry is not immune to changing market conditions though, so the ability to remain agile to take advantage of those changes is often the difference between success and failure. While the timeline from idea to generating revenue is much shorter today than years past, not having access to sufficient capital to get to each stage of deployment is also where many companies fail. Fortunately, there

are many more funding sources available than 10 years ago and we've seen some successful exits, but we've also seen the impact of failed SPAC financings that have someone dampened the enthusiasm of just a couple of years ago. The biggest mistake I see many entrepreneurs make though is to become so enamored with their technology that they don't focus on whether there is a sufficiently large market to justify the risk and investment needed to get to market. The start-ups need to have a clear insight into competition and the likelihood of other approaches impacting their market share.





(Promoting STEM Education & Space Exploration awareness in Schools & Colleges across Geographies)

#### ISRO - Registered Space Tutor

- Industry-Academia Partnerships
- B2B meetings A
- Advocacy

#### Glimpses of Explore The Space



Prof. V. Sumitrra Devi, CAO, ETS presents STEM & Space poster to Mr. Prakasha Rao P.J.V.K.S., Outstanding Scientist & Director - Space Infrastructure Programme Office, ISRO (Retd.) at the ETS - Albert Einstein STEM & Space Science Lab, Chennai on 20.10.2023





ETS was conferred the title "ISRO - Registered Space Tutor" by Mr. N. Sudheer Kumar, Director, CBPO, Dr. A.S. Kiran Kumar, Former Chairman & Mr. Shanthanu Bhatawdekar, Scientific Secretary ISRO at ISRO Headquarters, Bengaluru - August 2022



Explore The Space participating at Space Tech Expo, Long Beach, California, USA in May 2022



"Joy of Science", a fun-filled workshop, RKM Hr. Sec. School (South), Chennai - February 2019



Subhajit Maity, Accountable Manager, Thakur Institute of Aviation Technology, Mumbai with Jaydeep Mukherjee, PhD., NASA Scientist, Florida, USA - December 2023

"Explore The Space" is an educational NGO, registered in NITI Aayog, Government of India and works to promote awareness on Space Sciences and Technology among Schools and Colleges through seminars, quiz programmes, study tours and research. ETS connects Institutions and Industry through its programmes.

Established in 2010, The Global Trade Driver (TGTD), is a niche facilitator of Businesses connecting Indian Companies within the domestic market and International Markets, particularly USA through Business Delegations, B2B meetings, Strategic Consultancy, Advocacy and other programmes.

#### **Explore The Space & The Global Trade Driver**

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