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Looking back: ISPCS veterans reflect on 13 years of space industry growth  
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LAS CRUCES – There have been vast changes in the commercial space industry since the first International Symposium on Personal and Commercial Spaceflight was held in Las Cruces in 2005.

As the 13th edition of this coming together of industry leaders and entrepreneurs drew to a close Thursday, the Sun-News sat down with two of those leaders who have watched the ISPCS grow as the industry changed and the conversation turned from vague aspirations for the future into a more practical airing of trends, challenges and solutions.

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Mark Sirangelo is the corporate vice president of Sierra Nevada Space Corporation's Space Systems. He spoke at the first ISPCS. Since then, Sierra Nevada has created products that have enabled more than 45 planetary missions such as the Mars Curiosity Rover and New Horizons Pluto mission. Sirangelo is responsible for developing the Dream Chaser Cargo System to ferry cargo to and from the International Space Station through 2024. He has attended all but one of the symposiums.

Jeffrey P. Sutton is the CEO, president and director of the National Space Biomedical Research Institute, a bioscience research collaborative based in Houston. His work centers on medical research and his interest is in, among other things, how humans will live and thrive in space.

Here's what they had to say as they reflected on the evolution of the ISPCS. Their responses have been edited for clarity and length.

Sirangelo:

"At the time (of the first symposium), there were a group of us entrepreneurs who had started companies and wanted to do something different in space. It eventually became known as the commercial space industry. At that time it wasn't known as that. It was a group of entrepreneurs who were a little bit off the reservation. In my case, we had a dream that we were going to build a replacement for the space shuttle. I think we had 35 people at the time. So most people were pretty much just laughing at us.

"I think it was a lot more aspirational at that time. What was really special is there wasn't really a place in the other trade shows for people to have those kind of aspirational thoughts. This show came up at the same time as the spaceport and some of the other things going on in New Mexico. It became a place where we could

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go and congregate and talk about our dreams. In fact, my spaceship is called Dream Chaser in part because we chased our dreams a lot.

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“What we are now seeing is that there are a number of us who are either flying or building hardware and it’s moved toward not just theoretical, it’s moved toward what can you do in space, how can you live in space, what value can you bring. Is it something that’s a business? Can you make a business out of it? Before it was, ‘We think we can go do this.’ Now, in our case, we’re test flying. We’ve got the contract to go to the space station with NASA. We’re now moving toward how can we utilize space and I think a lot of people are looking at how can we live and work in space.

“That was something that was a hope before and now it’s happening. So we’re seeing the change where there are probably a number of companies here who are in the process of actually bringing people to space, bringing cargo to space, doing science in space. I think what we’re seeing here is that the dreams of before are now coming into the reality of today and that’s opening up a new set of aspirations. Where can we go?

“I think it’s an underrated thing – how much commitment New Mexico has given to this show and this industry. What we have seen is a number of the young students who went to school here are working in the industry. It opened up a lot of our eyes to the quality of the people and the students here in New Mexico which, I think, was one of the goals but wouldn’t have happened as easily because it’s a place we wouldn’t have been attracted. It brought us here with an open mind to see and hear that. If that was one of ISPCS’s goals, I think it’s succeeding and putting New Mexico on the map.”

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Sutton:

“I had the good fortune of coming to the first meeting, and it was fabulous. It was a star-studded lineup. I remember Elon Musk, Bruce Jenner, Al Gore was the lunch speaker. This was just after the X Prize was awarded for SpaceShip One. The first meeting clearly was one of great common interest that attracted a very large group of people, Hollywood types, people who were truly interested in development of rocket capabilities, of the commercial market as well as financial backers.

“I think what was evident is there was an excitement among a wide group of people internationally who saw fabulous opportunities in commercial space. And it really was, I believe, one of the first times this diverse group of people, some die hard space junkies but some people who I think really did see a future potential capabilities, came together in addition to the usual suspects, the NASA folks, FAA folks and so forth.

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"I think what then transpired was the reality began to sink in as to how difficult this really was going to be, what was the business model. I think there was a little bit of contraction in the outreach and involvement of the large group of people that took place. I think people really began to roll up their sleeves and began to figure out some of the infrastructure that was needed, the support capabilities, some of the political hurdles that needed to be overcome to support a new, complex, burgeoning field in commercial space.

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"It's really a great experience to attend the meeting today because of the nature of the presentations or perhaps more importantly, the discussions that are taking place. There's more structured dialog, in a very positive way, that is taking place at the meeting. I think Pat (Hynes, ISPCS curator) and her team have really done a fabulous job. Originations need champions to both push from the bottom and pull up from the top. I think that there's a core team that has the passion and the dedication as well as the domain expertise that really are critical for the success, not just of the symposium but of this new really exciting burgeoning field in general.

"I think that it's not often the case that one gets to witness, in a relatively short period of time, very large, transformative processes that really impact humanity in action and close up. What's taking place here and across the country and internationally really is an evolution of capabilities that we as humanity have to push the frontiers into what is possible. It is a uniting force. It rides above politics. It rides above borders. It brings people together from across countries and across generations."

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