

**Kennedy Space Center's
Thomas O. Engler
Champion of Innovation Award 2015 Nomination**

After more than 30 successful years of NASA providing crew transportation to low earth orbit, the fiscal year (FY) 2010 National Space Policy set a challenging goal for the commercialization of space, focusing on NASA support of commercial space companies to support the Nation's goal to enable the development of commercial space capabilities. As a result of this policy, the Director of the Kennedy Space Center formed the Center Planning and Development (CPD) Directorate to transform the center from a primarily program-funded facility to a center that would support governmental and commercial space launch activities. Mr. Tom Engler was at the forefront of this transformation successfully creating, implementing and managing the Partnerships Development Office and subsequently assumed the role of Deputy Director.

When CPD was first formed, KSC was an institution that was wholly program-funded and driven, with the main customer being the Space Shuttle Program (SSP). As the SSP was winding down, it became apparent that there would be a number of high-value facilities that would no longer be required by any NASA Program but that could be repurposed to support and enable the fledgling commercial space industry. This required that CPD lead the Center from being a sole-use facility supporting only government space activities to a Center that would be a robust multi-user spaceport supporting both government and commercial space activities.

In order to achieve this vision of a multi-user spaceport, it required creative and innovative leadership in the face of overwhelming odds. Mr. Engler was the right leader at the right time for this activity. As could be expected, turning over assets that had been used, in some cases like Launch Pad 39A, for over 40 years by NASA to achieve some of the most significant accomplishments ever attempted, met with fierce internal resistance from members of the NASA community.

Mr. Engler brought a fresh, new perspectives that would be crucial to identifying potential partners, developing agreements to transfer accountability of significant portions of KSC infrastructure and capabilities to these partners, and negotiating these agreements internally, at Headquarters and with the partner. Mr. Engler's unique vision and plan for achieving this was to attract personnel with an entrepreneurial mindset to develop the creative agreements that would be required to meet customer needs. He worked diligently to attract skilled and motivated personnel by appealing to a diverse group of employees' sense of challenge and offering them the opportunity to participate in the successful transition of the Center from a monolithic, program-centric center to one that supports multiple companies launching multiple vehicles while still supporting the core NASA programs at the center, including the Space Launch System and International Space Station programs.

To deal with peak agreement development workloads, Mr. Engler negotiated with other organizations to allow employees to join the team on a detail assignment. All of these employees brought their own experiences to the team and were able to share these with each

other to effectively develop partnerships. He ultimately developed an environment in the office that rewarded the taking of risks and continually recognized achievements, large or small.

Mr. Engler also developed a process to work with commercial and other governmental partners. This included the establishment of strict policies and guidelines to be used while Partnership Development Managers (PDM) were working with the commercial partners. These guidelines allowed the PDMs to establish trust with the partners to ensure full disclosure of their partnership requirements while ensuring that business plans were kept confidential. This was seen as a brand new way of doing business by potential partners and was well received. The policies helped ensure that the partners felt comfortable while they worked with the KSC team to develop partnerships

In order to overcome the resistance within KSC and NASA that was encountered during the initial wave of partnership development activities, Mr. Engler worked very closely with Center and Agency experts in real and personal property management as well as key representatives from the Center's Office of the Chief Financial Officer and the Center's Chief Counsel to develop the partnership products that were required to institute these agreements. He also worked with SSP personnel to educate them with regard to the benefits of establishing these partnerships.

Given that these types of agreements had never been developed and approved at KSC or at the Agency level, Mr. Engler worked to develop the partnering process that has been used successfully at the Center to approve partnerships at the Center and partner them with Agency decision-makers for their approval. This required ensuring that all of the required Center and relevant Agency stakeholders were included as a part of the partnership development process. This was especially critical since were working on partnerships with facilities and capabilities that were still SSP-controlled and institutionally-controlled assets.

Mr. Engler worked to gain stakeholder advocacy through the establishment of relationships including regular communication at both the Center and Agency level. The relationships that were built during the development of the partnerships ensured that the critical partnering activities were successful.

Because of Mr. Engler's vision and change leadership capabilities, Kennedy has become the lead center for commercial-use partnership within NASA. His leadership has resulted in over 50 active agreements encompassing several hundred million dollars of Agency assets which achieved over \$15 Million dollars in cost avoidance to NASA.

In truth, Mr. Engler played a pivotal role in changing the face of NASA and KSC. He enabled his team to develop a complex that is now successfully supporting both government and commercial space activities including payload processing, launch vehicle processing and launch of commercial and government vehicles.

Because of Mr. Engler's farsightedness, leadership and his uncanny ability to offer creative solutions to problems, Kennedy Space Center is the world's premier multi-user spaceport.