

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Launch Services, Missions, Operations and Facilities (2)

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KENNEDY SPACE CENTER: CREATING A SPACEPORT REALITY FROM THE DREAMS OF
MANY

Abstract

On December 17, 1903, Orville Wright piloted the first powered airplane 20 feet above the ground near Kitty Hawk, North Carolina. The flight lasted 12 seconds and covered 120 feet. Who would have guessed that the bizarre looking contraption developed by brothers in the bicycle business would lay the ground work eventually resulting in over a million passengers moved daily in a sky filled with the contrails of jets flying over 30,000 feet in elevation and over 500 miles per hour. Similarly, who would have guessed that the destructive nature of V-2 rockets of Germany would be the genesis of spaceflight to explore our solar system and beyond? Yet the interest in using the Kennedy Space Center (KSC) continues to grow. Potential customers have expressed interest in providing a location for testing new rocket engines, providing the world's largest aircraft for getting larger payloads to orbit from smaller rockets carried under the aircraft, multi-use launch platforms permitting diverse customers to use the same launch platform, new spacecraft development, and long term plans for lifting 150 metric tons to low earth orbit. The multitude of customers has grown and with this growth comes a need to provide a command, control, communication, and range infrastructure to address a much more frequent launch rate from a multitude of different customers. The Ground Systems Program Office (GSPO) at KSC is embarking upon developments to realize the dream of a spaceport. Many unique technical trade studies have been completed or are underway to successfully transition KSC into a multi-user customer focused spaceport. Like the evolution of the airplane, GSPO is working to turn the once unthinkable space opportunities into reality.