

National Aeronautics and Space Administration



THE FUTURE OF NASA @ THE KENNEDY SPACE CENTER

Mark Wiese
Chief, Flight Projects Support
Launch Services Program
Kennedy Space Center

www.nasa.gov

KSC IS PREPARING FOR THE FUTURE

Vision

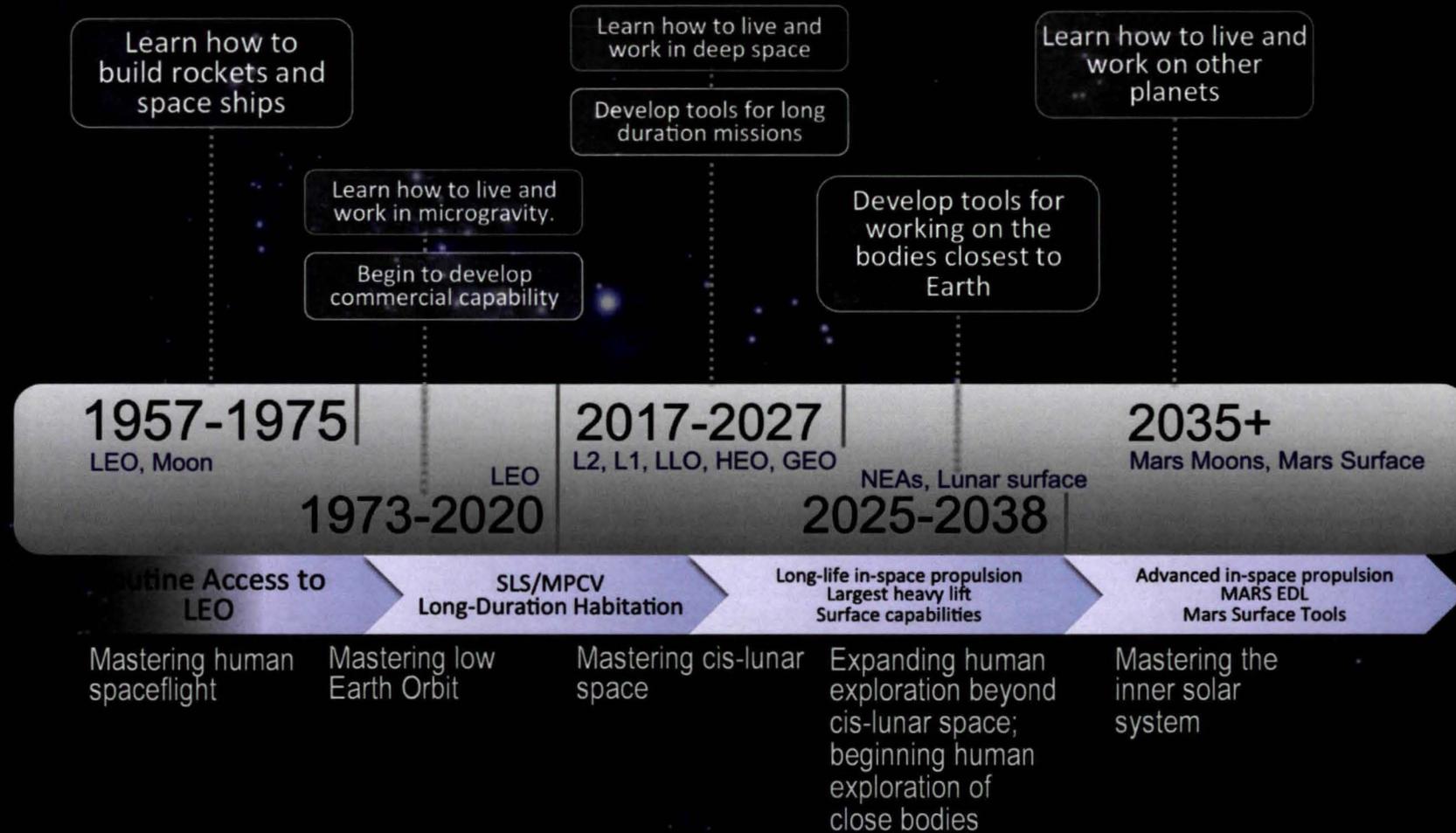
KSC is the world's preeminent launch complex for Government and commercial space access, enabling the world to explore and work in space

Mission

KSC safely manages, develops, integrates, and sustains space systems through partnerships that enable innovative, diverse access to space and inspires the Nation's future explorers

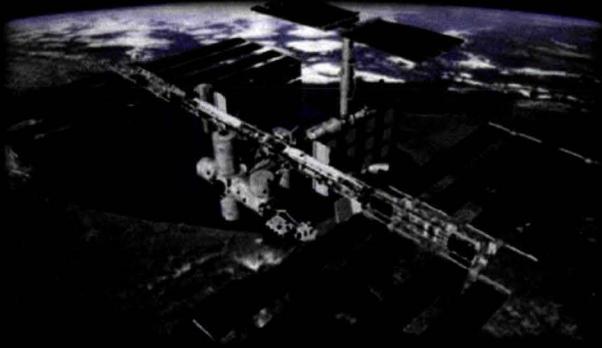


THE STORY OF HUMAN SPACE EXPLORATION



We are part of a larger, long-term exploration of space.

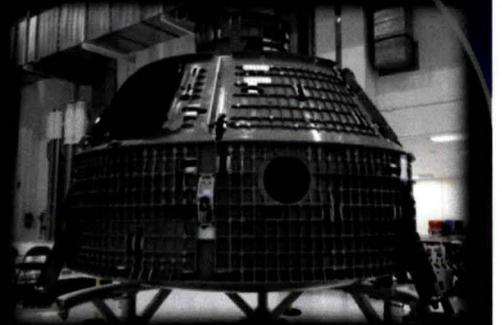
International Space Station



Launch Services



Exploration



Commercialization



SAME CREW

NEW RIDE

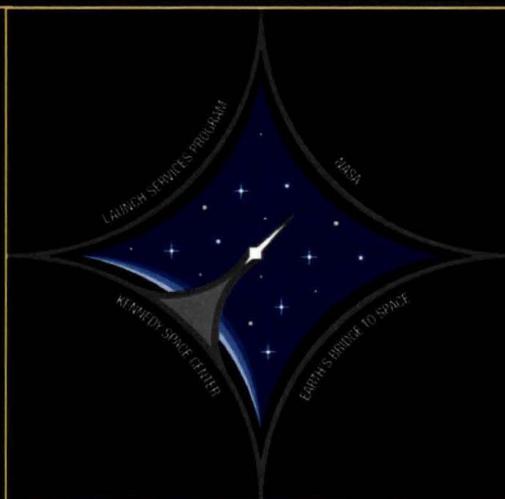
COMMERCIAL CREW



KSC PROGRAMS



**Ground Systems
Development and
Operations Program**

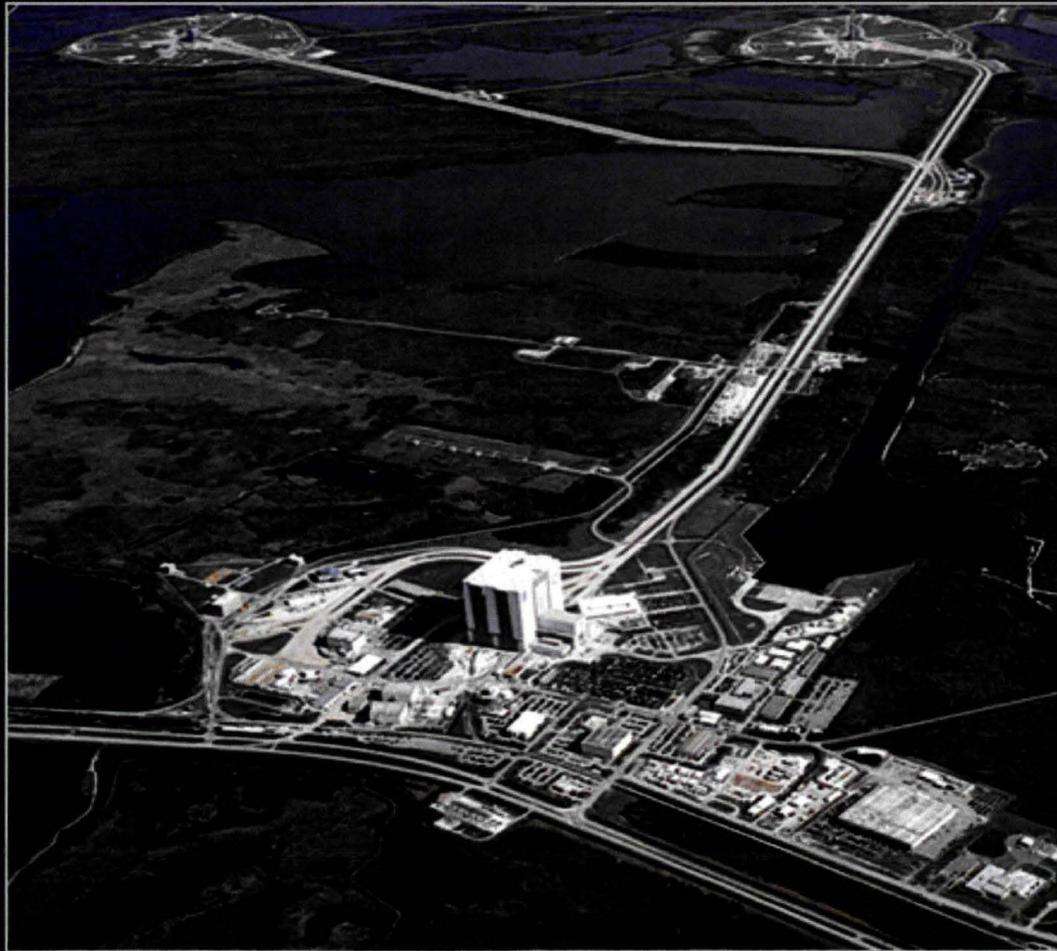


**Launch Services
Program**



**Commercial
Crew Program**

GROUND SYSTEMS DEVELOPMENT AND OPERATIONS (GSDO) PROGRAM

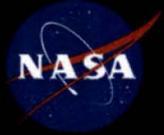


**Vehicle
Integration
and Launch**

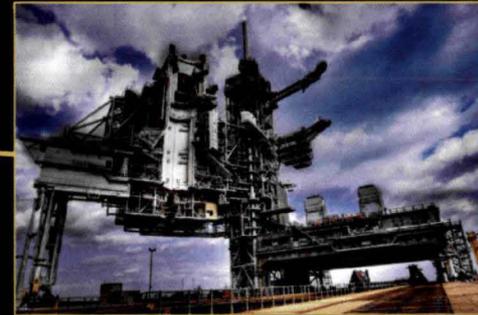
**Ground
Processing**

**Command and
Control**

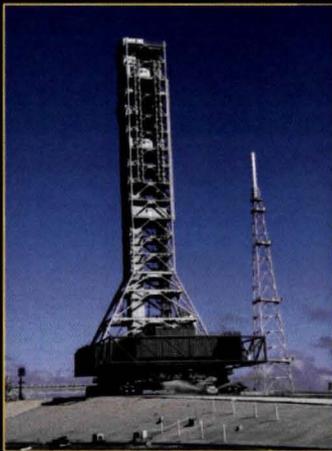
GSDO OBJECTIVES



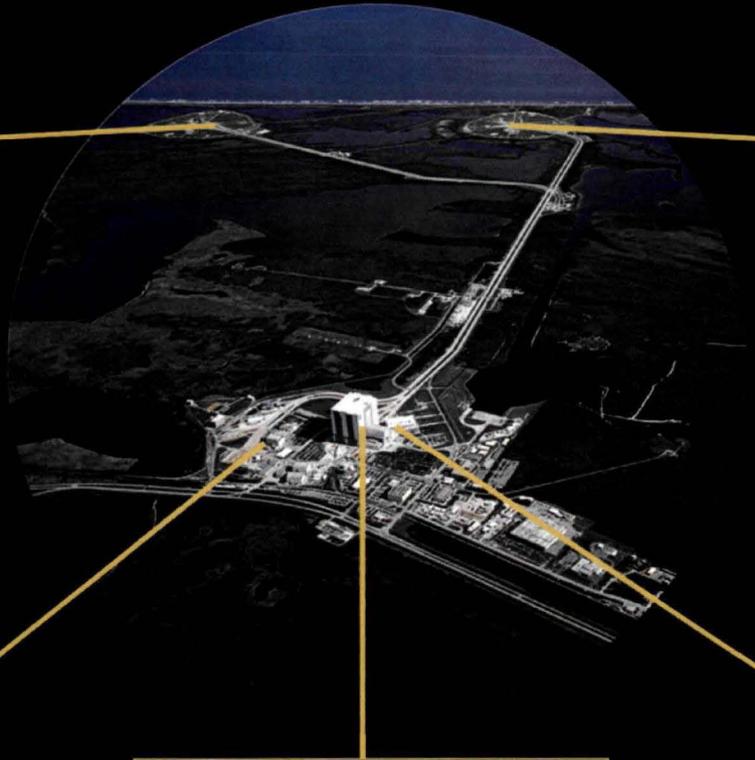
Clean pad concept



Shuttle pad configuration



Mobile Launcher and transport

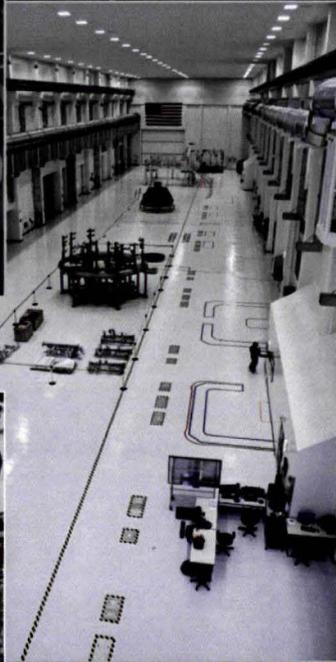
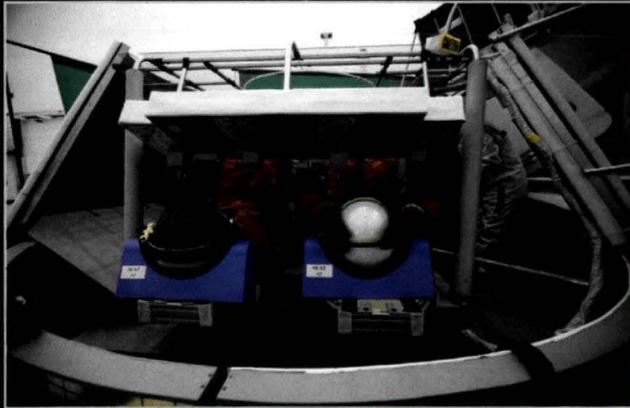


Multi-use integration

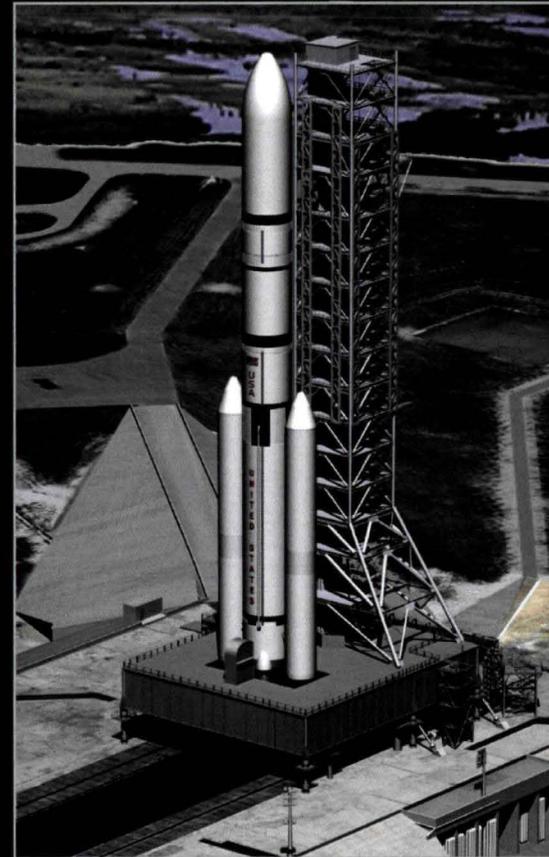


Communication, command, and control

HUMAN SPACEFLIGHT

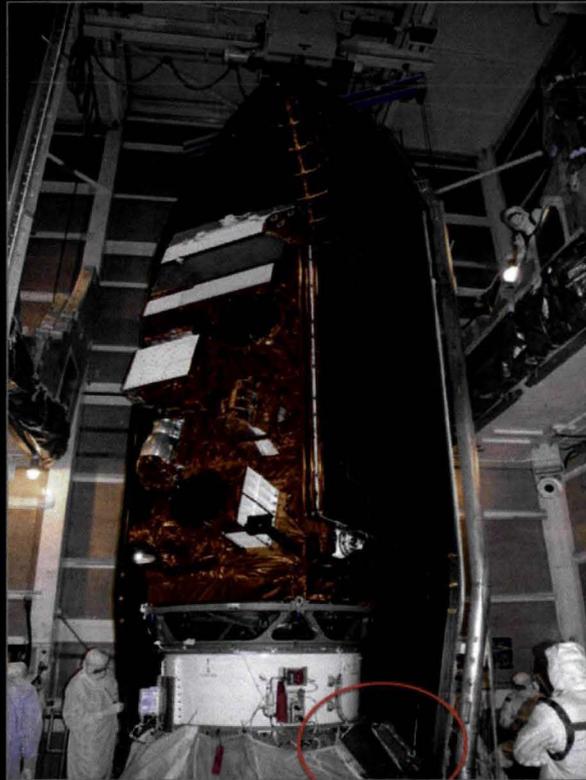


**Orion Multi-Purpose
Crew Vehicle**



**Space Launch
System (SLS)
Heavy-lift Booster**

LAUNCH SERVICES PROGRAM (LSP)

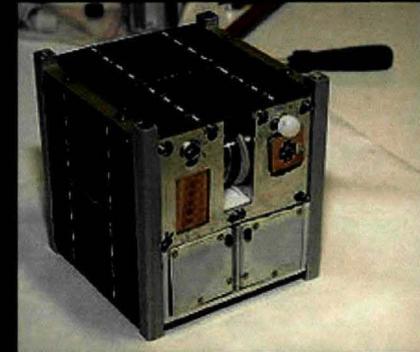


Launch Broker

Acquisition and
Program Management

Flight Design
and Trajectory

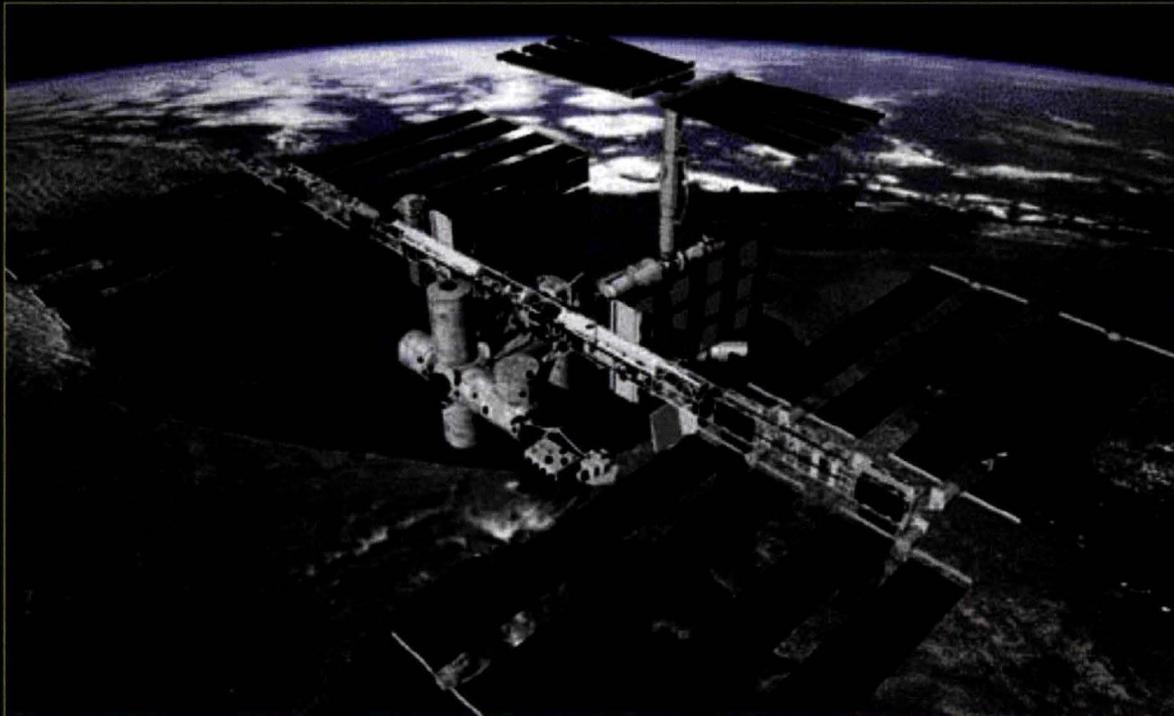
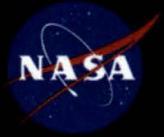
CubeSat
Launch Initiative



Mars Science Laboratory (MSL)
Launched November 26, 2011
Arrived on Mars on August 5, 2012



COMMERCIAL CREW PROGRAM (CCP)



**Facilitate
access to
Station**

**Drive private
sector
innovation**

**Reduce
reliance on
foreign
systems**

CCP CURRENT PARTNERS



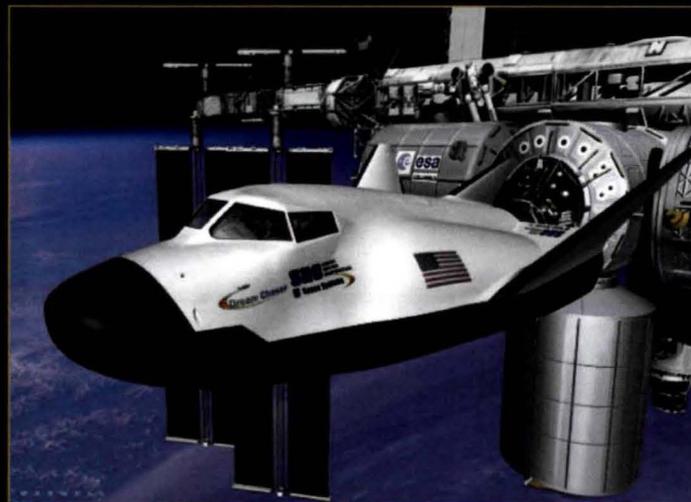
Commercial Crew Integrated Capability (CCiCAP)



Boeing

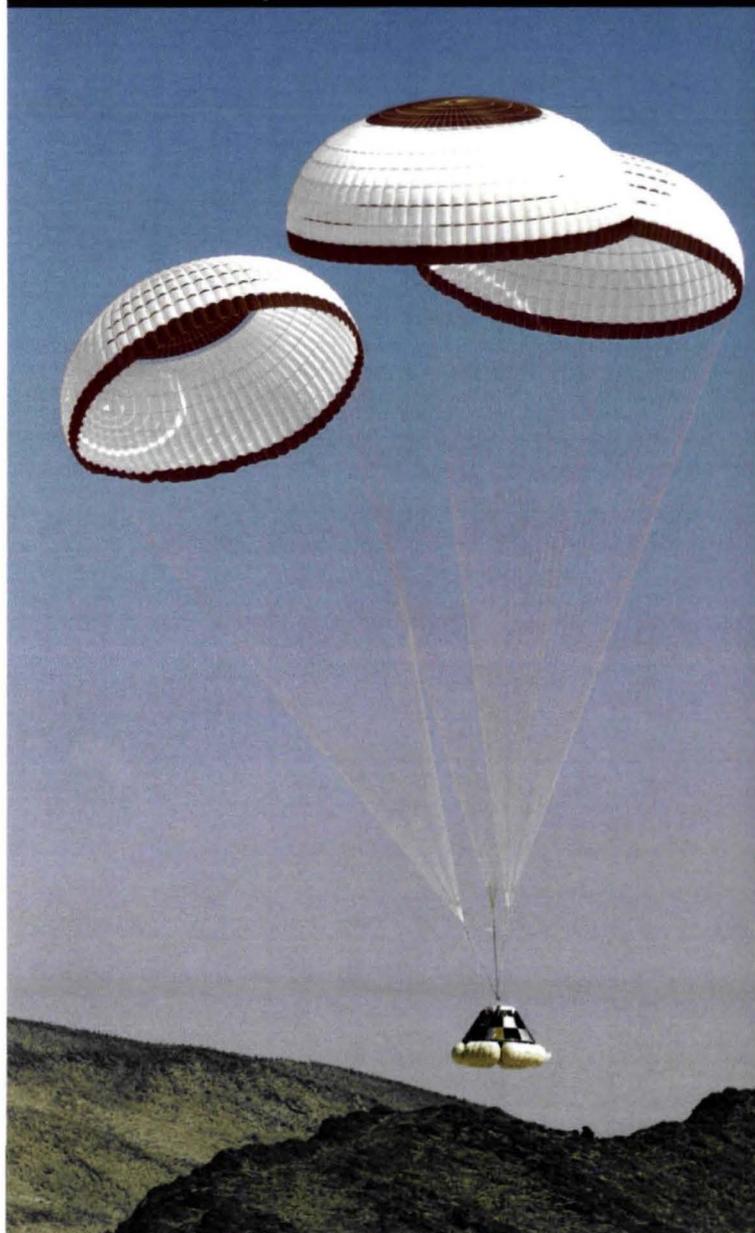


SpaceX



Sierra Nevada

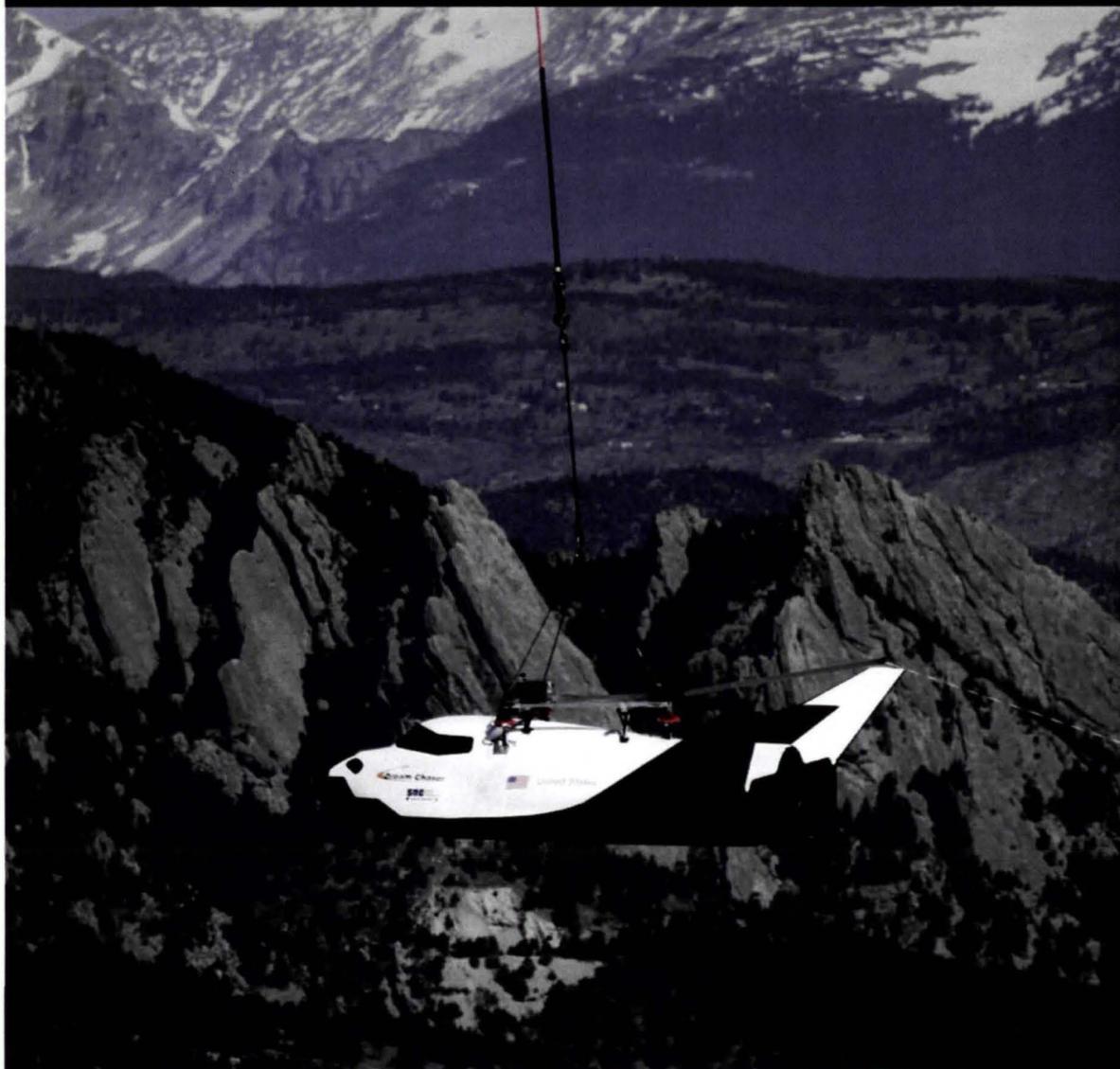
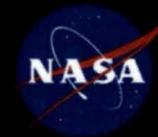
BOEING



May 2012

The Boeing Company's CST-100 crew capsule floated to a smooth landing beneath three main parachutes in Nevada, testing the entire landing system of the spacecraft. This was the second parachute test that Boeing performed under its partnership with NASA's Commercial Crew Program.

SIERRA NEVADA



May 2012
Sierra Nevada successfully completed a "captive-carry test" of its full-scale Dream Chaser orbital crew vehicle in preparation for a free-flight approach and landing test in coming months.

SPACEX

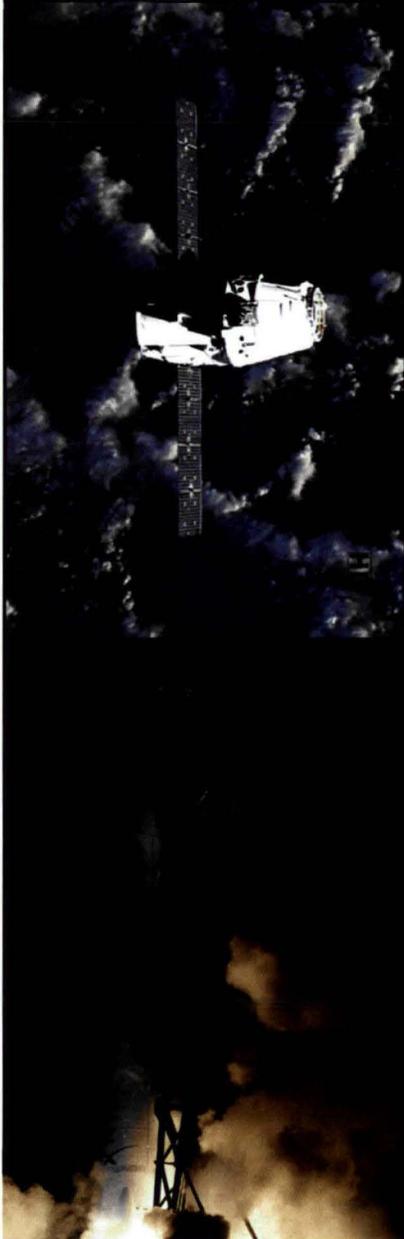


May 2012

Dragon's journey to the space station was SpaceX's second demonstration mission under NASA's Commercial Orbital Transportation Services Program.

Following a series of tests of its maneuverability and abort systems, the capsule was grappled and berthed to the space station by Expedition 31 crew members.

For the Commercial Crew Program, the company hosted crew accommodation trials of its Dragon capsule with NASA astronauts to check out the critical interior systems of the spacecraft.



PARTNERSHIP OPPORTUNITIES



Center Planning and Development Office (CPDO)



“Front Door” to engage new business focusing on:

- Master plan for KSC infrastructure, land use, and real estate strategies
- Commercial space transportation and services
- Retention of skilled aerospace workers and facility assets

[HTTP://KSCPARTNERSHIPS.KSC.NASA.GOV/](http://kscpartnerships.ksc.nasa.gov/)

SUCCESSFUL PARTNERSHIPS



- Orbiter Processing Facility 3 agreement
- 15 year use permit agreement
- Operations / maintenance savings of \$9.1 million
- Space Florida agreement to lease OPF-3 to Boeing



[HTTP://KSCPARTNERSHIPS.KSC.NASA.GOV/](http://kscpartnerships.ksc.nasa.gov/)

PARTNERING AVAILABILITY



Launch Complex 39 Area



Exploration Park



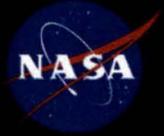
Landing Complex



Industrial Complex

[HTTP://KSCPARTNERSHIPS.KSC.NASA.GOV/](http://kscpartnerships.ksc.nasa.gov/)

ECONOMIC IMPACT



- President's FY 2013 proposed budget request for KSC:

\$2.1 billion

- KSC FY 2013 civil servant workforce:

2,049

- KSC Contracts and Grants Obligated in FY 2011:

\$1.5 billion

