COMMERCIAL CREW

LAUNCH AMERICA

SMD Symposium
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www.nasa.gov
The vision of commercial human spaceflight to low-Earth orbit is a robust, vibrant enterprise with many providers and a wide range of private and public users. A successful human space transportation system will strengthen the International Space Station Program, allow NASA to focus on deep-space exploration, potentially reduce the cost of human access to space and significantly contribute to the national economy. NASA’s Commercial Crew Program serves two purposes:

**Public Purpose**
Support the development of non-NASA markets for commercial human transportation services to and from low-Earth orbit.

**NASA Purpose**
Safe transport of NASA and NASA-sponsored astronauts to and from the station.

#LaunchAmerica
Boeing
Ongoing development and certification efforts on the integrated CST-100 Starliner spacecraft and United Launch Alliance Atlas V crew transportation system

SpaceX
Ongoing development and certification efforts on the integrated Crew Dragon 2 spacecraft and Falcon 9 crew transportation system

The same launch vehicles are also utilized by LSP, SLS, Air Force, etc.

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Establishing New Capabilities

• Requirements:
  Transport four NASA crew members to the International Space Station

  Provide a ‘lifeboat’ capability to return crew to Earth. Now using Soyuz spacecraft, limited to three crew

  Accommodate up to 100 kg (220.5 lbs) of soft-stowage cargo in a pressurized environment

*Commercial Crew* access to Space Station *enhances research* opportunities in orbit for *fundamental* research into human physiological processes and *practical evaluation* of potential disease-fighting medicines.

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Collaboration with Other Programs/Agencies

• NASA Launch Services Program (LSP)
  – Task agreements
  – Fleet data

• NASA Space Launch System (SLS)
  – Engine analysis, hazard reports
  – Design and construction standards

• USAF (SMC) and Aerospace Corporation
  – Weekly meetings
  – Data exchanges