

Commercial Crew Development

Sierra Nevada Corporation (SNC) is partnering with NASA to advance the development of a commercial crew space transportation system as part of the Commercial Crew Development (CCDev) program. CCDev is funded by the American Recovery and Reinvestment Act (ARRA) and is an economic stimulus to aid private sector efforts to develop and demonstrate human spaceflight capabilities. SNC is committed to expanding the market for human spaceflight. SNC's studies of the potential users of commercial transport to low Earth orbit (LEO) indicate a strong business case with multiple government and civil customers needing orbital and suborbital transport. Dream Chaser is a commercial space transportation system based on NASA HL-20 design launched on an Atlas V launch vehicle.

Dream Chaser is the ideal spacecraft for human transport to low Earth orbit and has significant heritage and completed development work. It is a fourth-generation design that compiles years of NASA analysis and wind tunnel research with Sierra Nevada engineering into a fully-reusable, pressurized, lifting-body spacecraft which returns to Earth for a gentle runway landing. It is a piloted lifting body spacecraft that offers significant advantages over capsules for human transport. Increased cross range and lower g forces on entry improve safety and landing opportunities while providing a more benign entry environment for crew and science experiment return.

Partners

AdamWorks - Aerojet - Boeing - Draper Lab
MacDonald Dettwiler - NASA Langley Research Center
United Launch Alliance - University of Colorado

