

Steve MacLean

Dr. Steve MacLean was President of the Canadian Space Agency responsible for the CSA and the Canadian Space Program from 2008 to 2013.

He was selected as one of the first six Canadian astronauts in December 1983, Dr. MacLean began astronaut training in February 1984. From 1987 to 1993, he was the Program Manager for the Advanced Space Vision System (ASVS), a computer-based camera system designed to provide guidance data that enhances the control of both Canadarm and Canadarm2, and the Laser Camera System (LCS). Both systems are still in operation on the shuttles and the International Space Station.

From October 22 to November 1, 1992, Dr. MacLean flew onboard Space Shuttle Columbia as a Payload Specialist for Mission STS-52. During this mission, he performed a set of seven experiments known as CANEX-2, which included an evaluation of the Space Vision System.

In the aftermath of the Space Shuttle Columbia accident in 2003, Dr. MacLean was actively involved in NASA's efforts to increase the safety of the crew and the security of the vehicle until Return to Flight in 2005. As such, he became the technical lead for the Canadian-built Orbiter Boom Sensor System and a member of the NASA board responsible for ensuring the integrity of the vehicle's thermal protection system prior to re-entry into the atmosphere.

Dr. MacLean went to space for the second time on Mission STS-115, and served as mission specialist on Space Shuttle Atlantis acting as flight engineer and robotics lead for the first assembly flight of ISS after the Columbia accident. He became the first Canadian to operate Canadarm2 in space when the crew installed trusses and deployed solar array panels on the International Space Station. On this mission, Dr. MacLean also became the second Canadian to walk in space.

Dr. MacLean was a visiting scholar at Stanford University under laser physicist and Nobel Laureate A.L. Schawlow. As a laser physicist himself, Dr. MacLean's research has included work on electro-optics, laser-induced fluorescence of particles and crystals, multi-photon laser spectroscopy and the development of a ring laser in the ultraviolet.

A strong supporter of science literacy and child education, Dr. MacLean holds a Bachelor of Science (Honours) and a Doctorate in Physics both from York University in Toronto.

Dr. MacLean is married and has three children.

