

Debora A. Fairbrother

Debora A. Fairbrother is Chief of NASA's Balloon Program Office, headquartered at the Agency's Wallops Flight Facility in Virginia. As chief of the program, she leads a team of nearly 100 civil servant and contractor personnel who manage the space agency's scientific balloon program. The program office is responsible for 10-15 science missions per year launching from worldwide locations, such as New Zealand, Antarctica, and Sweden as well as in the United States.

Fairbrother, a native of Plano, Texas, attended Texas A&M University in College Station, Texas, earning bachelor's and master's degrees in Mechanical Engineering in 1990 and 1992. After graduation, she began her career as an engineer working for Winzen International Inc., where she worked on a number of new scientific balloon manufacturing technologies, such as a heat seal flaw detector. Additionally, she worked on key programs developing new modeling tools to better characterize balloon ascent trajectories as well as balloon performance.

At Winzen, Fairbrother rose to Vice President of Engineering, where she managed the technical activities of several programs including balloons, and lighter-than-air systems. In addition, she designed and supervised the construction of the Balloon-Assisted Launch System, a new technology with the objective of lifting a rocket to altitude, where the rocket would then release and ignite, carrying a spacecraft into low-Earth orbit.

Fairbrother began her career with NASA in 1999 working as a balloon technology manager at Wallops Flight Facility. In this capacity, she was a central figure in the development of the Ultra-Long Duration Balloon. In addition, she served as a key member of a multi-disciplinary team developing the concept of and techniques for interplanetary ballooning. In addition, she served as a member of the 60-million-cubic-foot (1.7-million-cubic-meter) balloon development team, responsible for building and launching the largest volume NASA scientific balloon in the last 30 years.

Fairbrother has served as chief of the office since 2012.

NASA's scientific balloons offer low-cost, near-space access for scientific payloads weighing over one metric ton for conducting scientific investigations in fields such as astrophysics, heliophysics and atmospheric research.