

NASA Advanced Life Support Technology Testing and Development

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Prior to 2010, NASA's advanced life support research and development was carried out primarily under the Exploration Life Support Project of NASA's Exploration Systems Mission Directorate. In 2011, the Exploration Life Support Project was merged with other projects covering Fire Prevention/Suppression, Radiation Protection, Advanced Environmental Monitoring and Control, and Thermal Control Systems. This consolidated project was called Life Support and Habitation Systems, which was managed under the Exploration Systems Mission Directorate. In 2012, NASA re-organized major directorates within the agency, which eliminated the Exploration Systems Mission Directorate and created the Office of the Chief Technologist (OCT). Life support research and development is currently conducted within the Office of the Chief Technologist, under the Next Generation Life Support Project, and within the Human Exploration Operation Missions Directorate under several Advanced Exploration System projects. These Advanced Exploration Systems projects include various themes of life support technology testing, including atmospheric management, water management, logistics and waste management, and habitation systems. Food crop testing is currently conducted as part of the Deep Space Habitation (DSH) project within the Advanced Exploration Systems Program. This testing is focused on growing salad crops that could supplement the crew's diet during near term missions.