



Space Technology Mission Directorate Game Changing Development Program **Astrobee**

Goal

The HET2/Astrobee project is developing a new free-flying robot to succeed the existing SPHERES facility as a guest science research platform and to perform IVA work on the ISS.

Relevance

The project will increase the capabilities of robots to perform IVA/EVA work in space and will increase the efficiency of human explorers by allowing routine, repetitive work to be off-loaded to robots.

Approach

The project conducted incremental design and development of a robotic free flyer that meets project, stakeholder, and ISS interface and safety requirements.

Results

3 free flyers are on-orbit. The first robot has been unpacked and has begun flying autonomously within the ISS under crew supervision. Commissioning activities to validate the system continue.



NASA Astronaut Anne McClain



CSA Astronaut David St-Jacques



NASA Astronaut Christina Koch