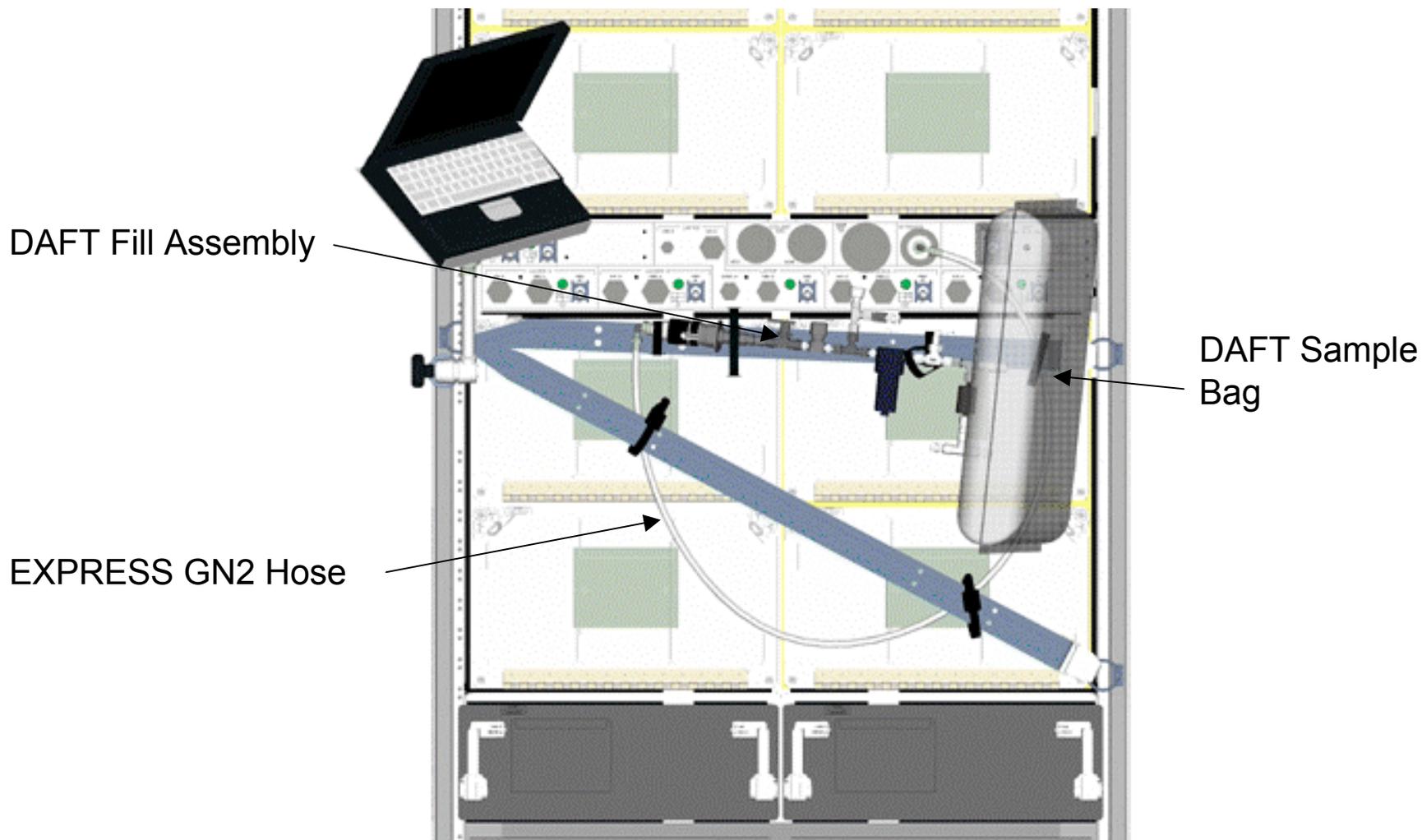


# Operations

## *DAFT-3 and DAFT-4*

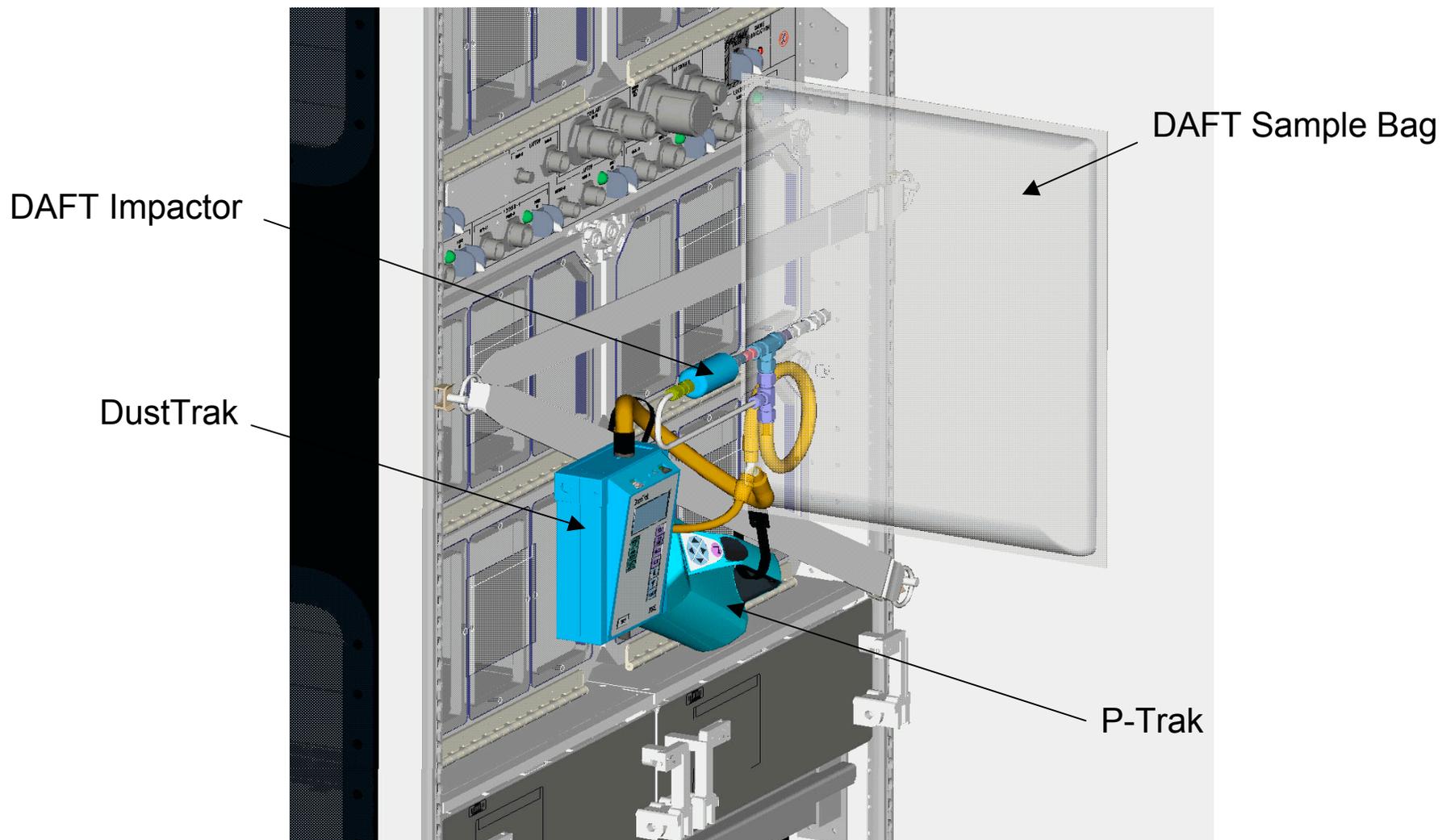


**DAFT Sample Bag Inflation**



# Operations

## *DAFT-3 and DAFT-4*





# On-Orbit Operations

## DAFT

**Accomplishments:** For DAFT-1 and -2 operations, undisturbed air was sampled in the Destiny Module in front of EXPRESS Rack 4, in the module's aft end, and in the node. One test deliberately generated aerosol by repeatedly separating Velcro. For DAFT-3 and -4 operations, three test points were successfully performed while sampling a known aerosol, Arizona Road Dust. Results were compared to those of a measurement standard, the DustTrak. DAFT was returned to the ground aboard shuttle flight 12A.1.



*Expedition 10 Commander and NASA Science Officer Leroy Chiao performing DAFT-1 and -2 operations*



ISS013E69250

*Expedition 13 Flight Engineer and Science Officer Jeff Williams performing DAFT-3 and -4 operations*

**Significance:** DAFT-1 and -2: The P-Trak appeared to operate nominally with no internal errors or nozzle clogging. Results indicate that the ISS atmosphere is substantially cleaner than the shuttle or a typical office environment. DAFT-3 and -4: Based on an analysis of the results, the DAFT science and engineering team has concluded that the P-Trak functions nominally in a microgravity environment, satisfying the objective of the experiment. This significantly reduces a technical risk to the future success of SAME.