

BUDDY SECONDARY LIFE SUPPORT SYSTEM (BSLSS)

The BSLSS is a portable system which allows the supplying of LCG Cooling Water to two astronauts from one PLSS. The system includes an umbilical (thermally sheathed), a tether to provide strain relief for the umbilical, a PLSS Multiple Water Connector (which mates to the "failed" crewman's PGA) a Flow Divider Connector (which mates to the "functional" crewman's PGA), and a thermally insulated stowage bag.

If one of the crew's PLSS water cooling capacity is impaired or lost, he disconnects the normal PLSS water umbilical and connects the standard connector end of the BSLSS to his suit. The other crewman, whose PLSS is still functioning normally, disconnects his PLSS water umbilical, attaches the divider connector to his PGA, and reconnects the PLSS water umbilical to the other side of the divider connector. The transport water flow from the functioning PLSS is now shared by the two crewmen. The tether hooks are attached to the PGA IM restraint rings so that the tether relieves the water hoses of any strain.