

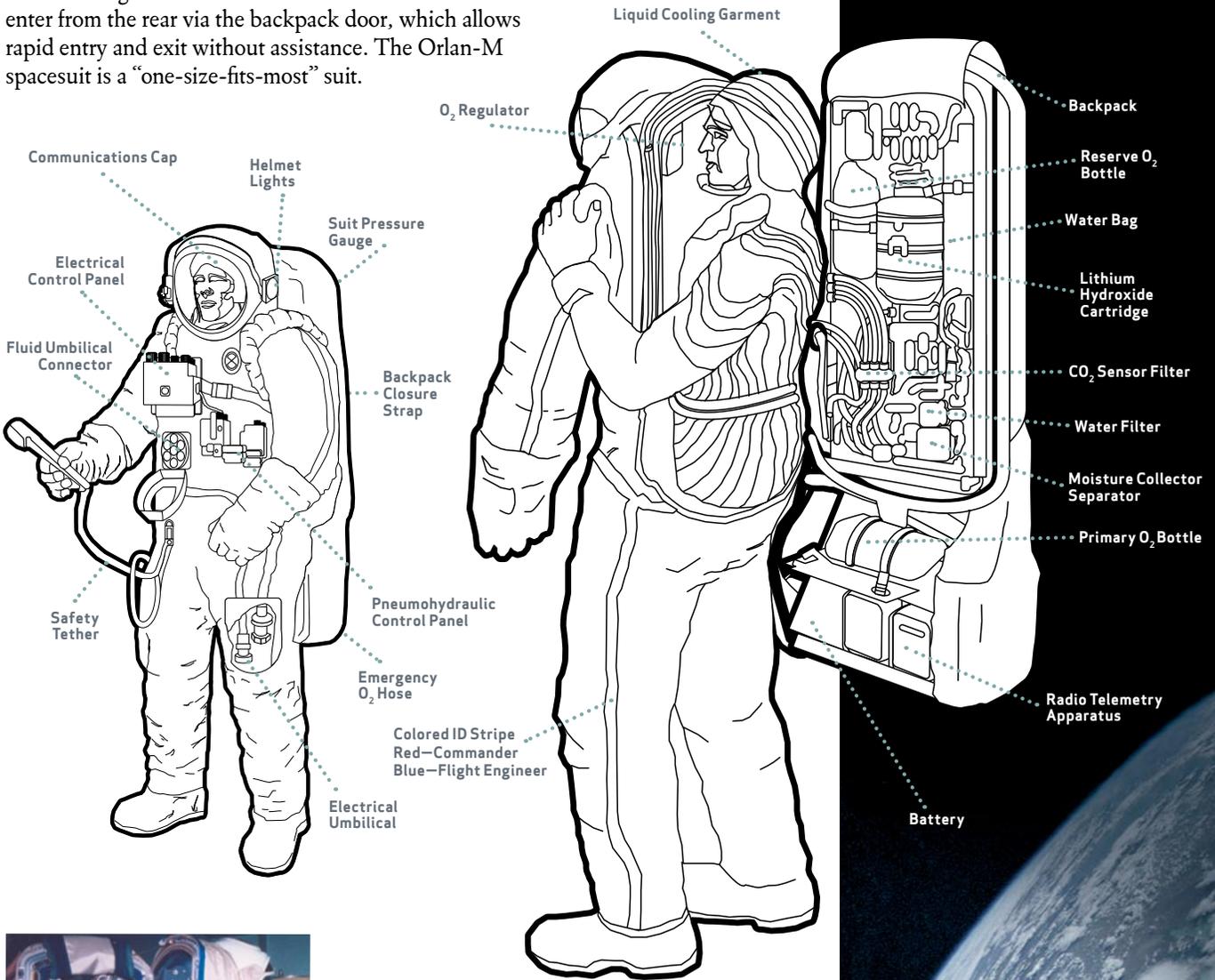
# Orlan Spacesuit

Russian Federal Space Agency (Roscosmos)/  
Science Production Enterprise Zvezda

The Orlan-M spacesuit is designed to protect an EVA crewmember from the vacuum of space, ionizing radiation, solar energy, and micrometeoroids. The main body and helmet of the suit are integrated and are constructed of aluminum alloy. Arms and legs are made of a flexible fabric material. Crewmembers enter from the rear via the backpack door, which allows rapid entry and exit without assistance. The Orlan-M spacesuit is a “one-size-fits-most” suit.



Crewmember in liquid cooling garment prepares to enter Orlan hatch.



Interior of Orlan suit with rear access hatch open.

The suit operates at a nominal 0.4 atm (5.8 psi) with a 100% oxygen atmosphere.

The suit's maximum EVA duration is 7 hours.

The weight of the entire Orlan assembly is 238 lb.

Orlan is designed for an on-orbit lifetime of 12 EVAs or 4 years without return to Earth.

