

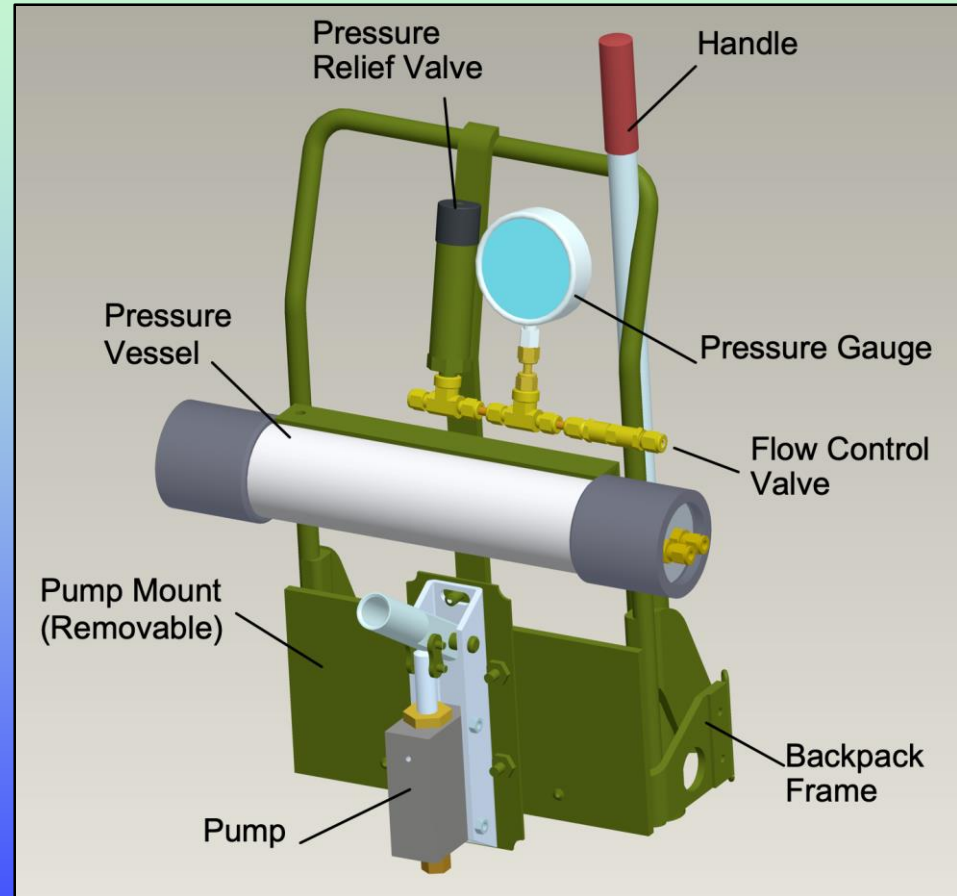


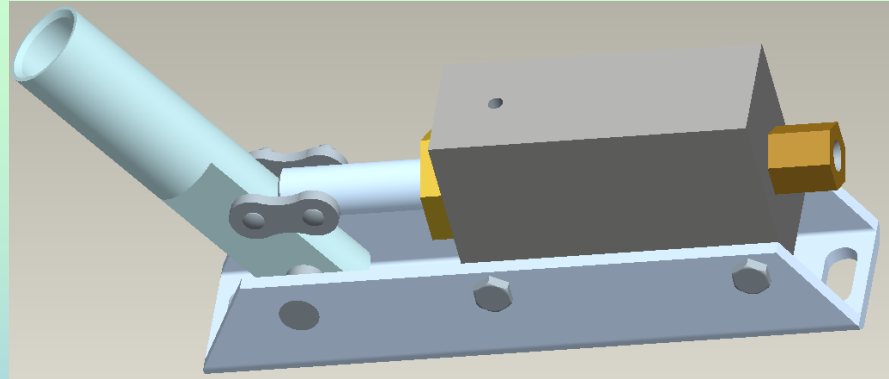
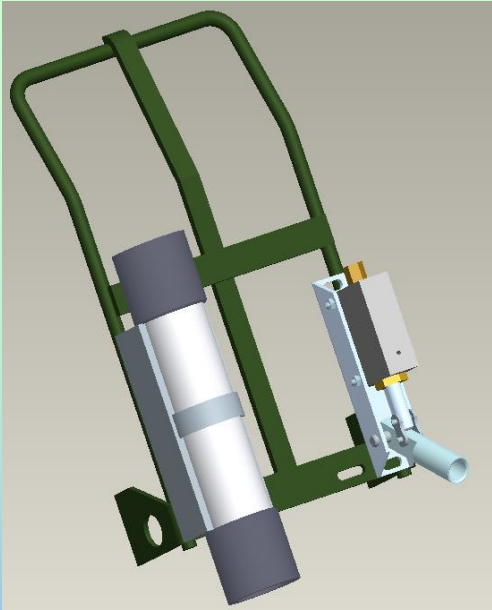
# Backpack-Mounted Desalinator

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## Objective

Design a compact, manually operated reverse osmosis desalination system that can be used in case of emergency or extended sea voyage





**STAR Hydraulic Pump**



**U. S. military ALICE backpack frame**

Membrane	Applied Pressure (psig)	Size (Diam. × Length)	Salt Rejection
SW30-2514	800	2.5" × 14"	99.4%
Pressure Vessel	Working Pressure (psig)	Size (Diam. × Length)	Material
RO2531	1000	2.8" × 17.1"	fiberglass