



# Thermal Revolutions

## Challenge 7

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### DESIGN CONCEPT

- Uses Thermoelectrics and heat pipes to continuously cool the wearer.
- Heat is drawn from body by thermoelectrics, transported by the heat pipes, and exhausted passively through a heat sink worn on the belt.



### DESIGN HIGHLIGHTS

- Simple, inexpensive, compact design is self-contained.
- Reversible to be used as a personal heater.
- Easy to maintain/repair.
- Few moving parts.

### SOLDIER BENEFITS

- Vary armor temperature according to need and comfort level
- Increases comfort to soldier
- Increases the ability of the soldiers to combat longer
- Combat in harsh weather conditions
- Compact and comfortable—fits under body armor without adding bulk.