TO SAVE LIVES AND PREVENT SERIOUS INJURY BY IMPROVING THE COMFORT AND CONVENIENCE OF SAFETY HARNESSES USED BY HUNTERS.

Background

Of the 11 million hunters each year, nearly 80% use treestands. Of those who use treestands, 1 in 3 will fall from their stands. Falls from treestands can result in broken bones, spinal injury, or even death. The number and severity of these injuries could be reduced by using a fall arrest system. Some choose not to wear a safety harness because it is uncomfortable, restrictive to motion, hard to put on, and/or noisy.

Project Objective

The intent of these improvements is to create a safety harness that hunters will want to wear; one that is comfortable and easy to use without compromising functionality.

Improved Design

THE INTENT OF THESE IMPROVEMENTS IS TO CREATE A SAFETY HARNESS THAT HUNTERS WILL WANT TO WEAR; ONE THAT IS COMFORTABLE AND EASY TO USE WITHOUT COMPROMISING FUNCTIONALITY.

Characteristics of Improved Harness Design

- Reduced weight of harness
  - Decreased weight by 44% (2.5 lbs → 1.4 lbs)
- Improved ease of use
  - No loose webbing components
  - Leg straps clearly defined
- Improved Comfortable
  - Lightweight
  - Ventilated padding components
  - Leg pads provides cushion when suspended
  - Back pad provides cushion from O-ring
  - Should pads provide cushion from webbing when suspended
- Easy to manufacture
  - Bar tack much easier to create vs double-W stitch pattern
- Economical Design
  - Material costs ~$53.49 (using retail value of materials)
  - Essentially, made from the same materials, but used less of them, then add padding and O-ring

Reference: