NAU Capstone Team 5
South San Francisco Street
Flagstaff, AZ 86011
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Steve Larimore
Department Manager
Tactical Systems Mechanical Design/Mechanical Systems Design Center
Raytheon Missile Systems
1151 Hermans Road
Tucson, AZ 85756

Dear Steve Larimore and Raytheon Associates:

First off, we would like to thank you for the opportunity to work with you on this release lanyard project. We understand that on occasion, the lanyard is failing to activate the device due to icing, poor installation, and contaminates (sand, dust, etc.). As a result we have worked to find a new design that is more reliable and less susceptible to these modes of failure. We recently had a change of design focus, and are currently proposing the housing concept with a strictly mechanical activation system to follow. The final activation design concept is in the works and will be designed so that the casing and the mechanism are one entity.

Casing Concept:

1. Addresses the issues of contamination causing failure which will improve the performance
2. Decrease installation time
3. Increased reliability
4. Maintains current device locations

Since the entire final design has not been identified, the exact cost of the design is yet to be determined. With the necessary engineering analysis and research carried out, the material cost, manufacturing cost, and installation time will be quantified. The primary task over the holiday break is to identify which mechanical activation system to proceed with. Once the dimensions have been identified, our current casing prototype can be updated to accommodate the design. We understand there is quite a bit of work left to complete and are working to stay on top of it all.

Again we thank you for the opportunity and look forward to meeting with you.

Sincerely,

Christopher Temme
Carly Siewerth
Timothy Haynes
Styson Koide
Andrew Baker
David Lofgreen