

Exceptional service in the national interest

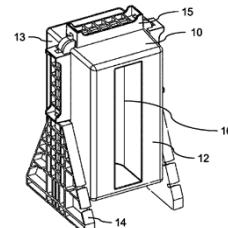
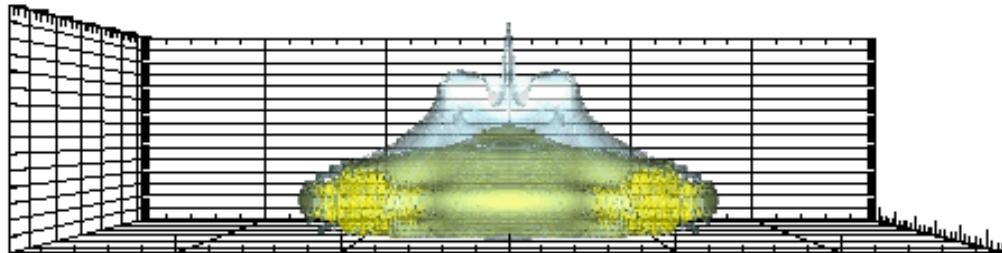
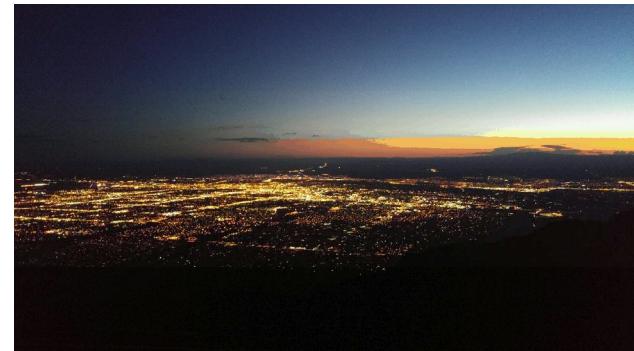


Fig. 1



Marc Thomson

1555 / John Pott / John Korbin, David Peterson, and Greg Sharp

Background

- University of Colorado at Boulder
- Majors in Applied Math, Chemical/Biological Engineering, Minor in History
- Interest in field:
 - No background in solid mechanics!
 - They say math is useful everywhere, so why not?
- Why Sandia?
 - Pania's presentation: power of computational models
 - Prior experience in mathematical modeling
- Hobbies:
 - Hiking, Rock Climbing, Mountain Biking, Reading, Coffee, Stargazing

What did I do?

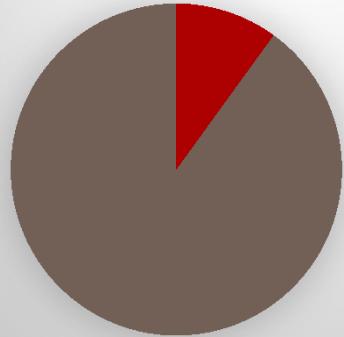
- I developed code that helps run parametrized simulations
- I ran simulations to optimize devices.
- The code submission is now streamlined and user-friendly. It can also preempt failed simulations and save the user time.
- I am converting to year-round, so my projects will continue during the school year

What was my experience like?

- Solid Mechanics is much more complicated than I expected.
- I loved touring tech area 3. Specifically, I loved the mechanical shock lab
- I was trusted to do meaningful work
 - Never felt like grunt work
 - I feel accomplishment
- I learned a lot about how close the US came to nuclear disaster, and how Sandians helped prevent it.

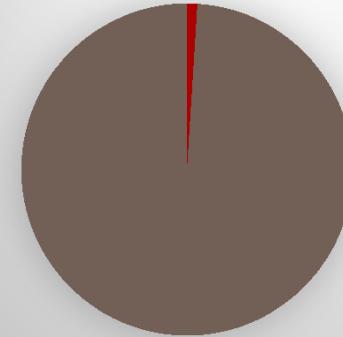
My Most Important Lesson...

My Perception Before



- Things I Know
- Things I Don't Know

My Perception Now



- Things I Know
- Things I Don't Know