



Welcome to Integration Night!

Please enjoy the pizza! 😊

Welcome!

- We are so excited!
- Introductions
- Is this your...
 - FIRST time ballooning?
 - SECOND?
 - THIRD?
 - FOURTH?
- No matter your experience, we hope you have fun!



What's going to happen today?

- Each team will get the chance to share their designs (5 mins)
 - What does your payload do?
 - Did you face any obstacles?
- Grad school judges will observe
- We'll string together the payloads, getting ready for tomorrow

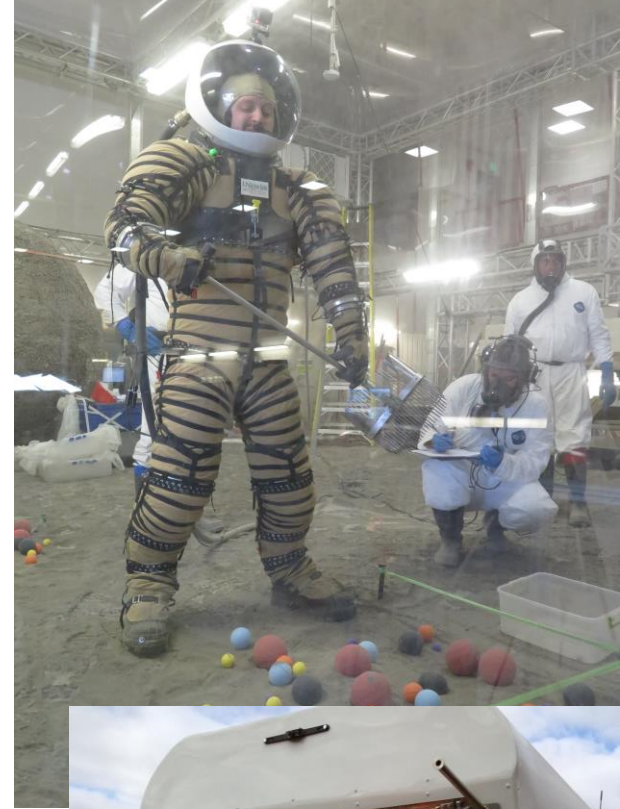


Tomorrow Morning (also in your agenda)

- Everyone meets here, Skalicky 211
 - 7:30 Light Breakfast
 - 8:00 Tours Start
- One **payload specialist** from each team will join the fill team outside
 - We will walk you over to Ryan Hall's garage
 - If your payload is good to go by **tonight** (if you don't have an on or off button) you do not need to send a specialist.

Everyone else

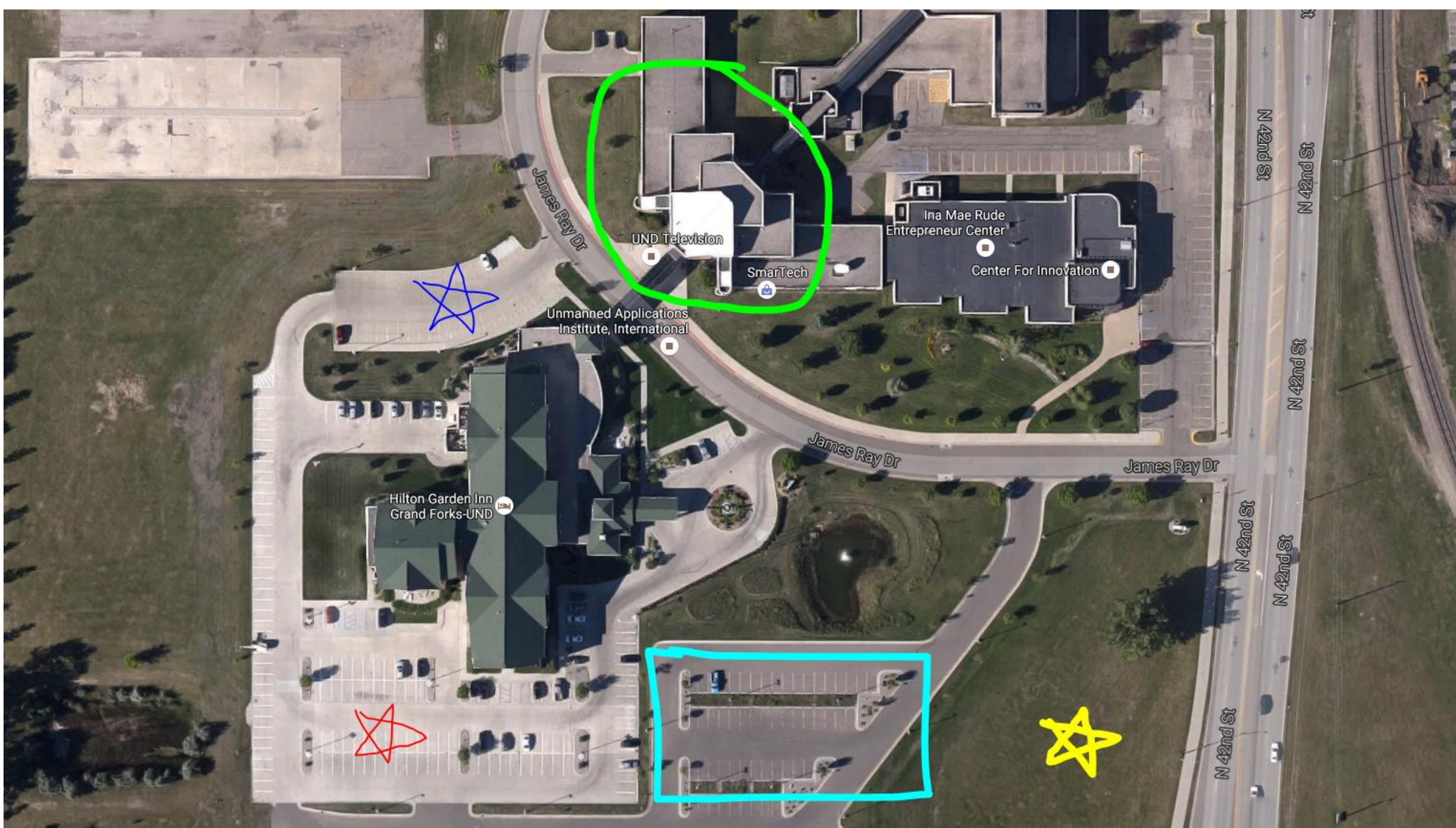
- We'll take you on a short tour of the Human Space Flight Laboratory
 - (it takes a while to fill, may get cold, lots of bodies standing around)
- We'll reconvene at 8:45 am (Ryan Hall) to complete filling and walk over to the launch site together



Launch!

- Due to the number of teams, we have **two school buses** for the chase
- We will assign each team to a bus after we weigh your payloads, today
 - Bus 1 will follow Balloon 1
 - Bus 2 will follow Balloon 2
- Remember to check out of the hotel **before** you arrive here.





James Ray Dr

UND Television

SmarTech

Ina Mae Rude
Entrepreneur Center

Center For Innovation

Unmanned Applications
Institute, International

Hilton Garden Inn
Grand Forks-UND

James Ray Dr

James Ray Dr

N 42nd St

N 42nd St

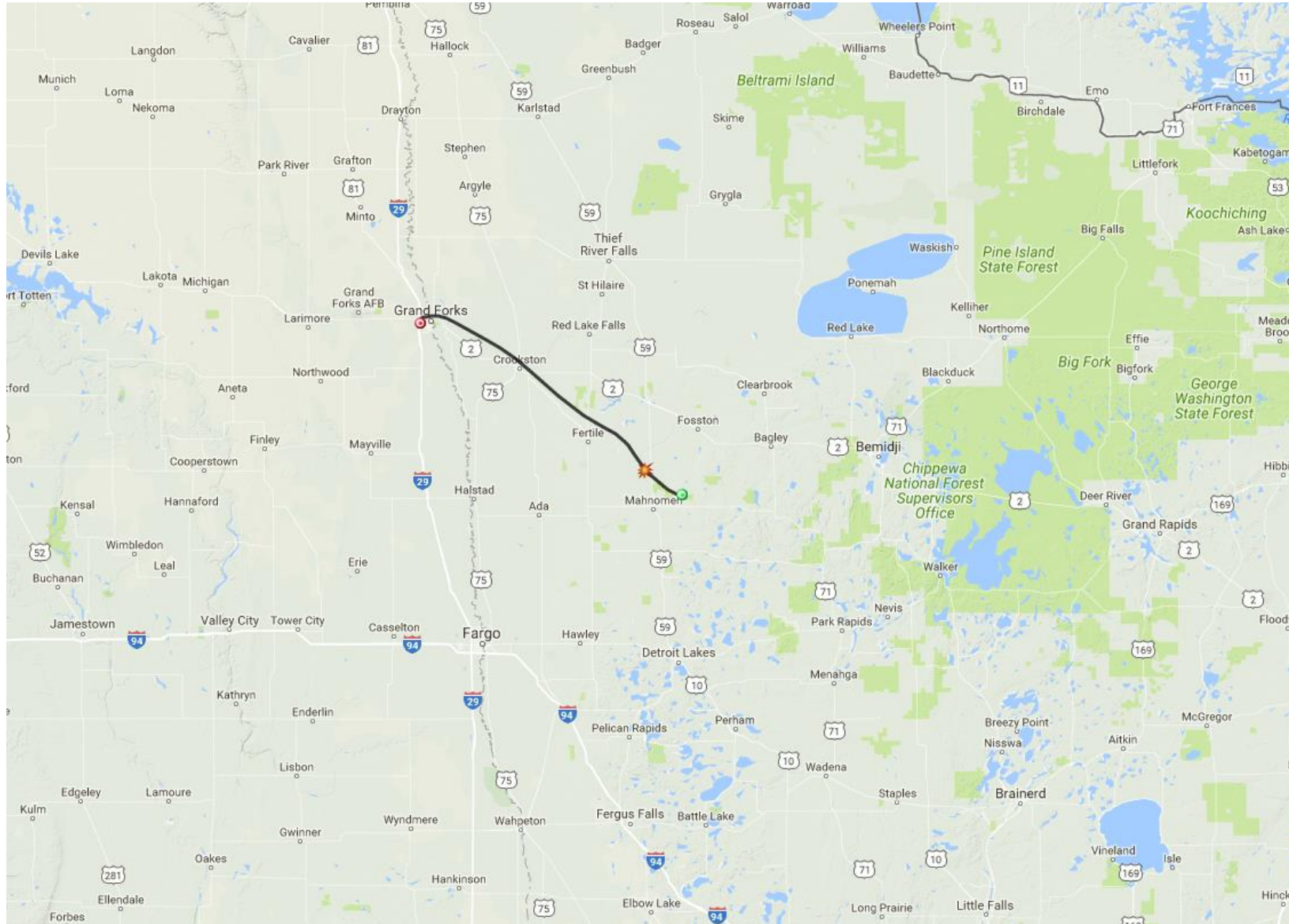
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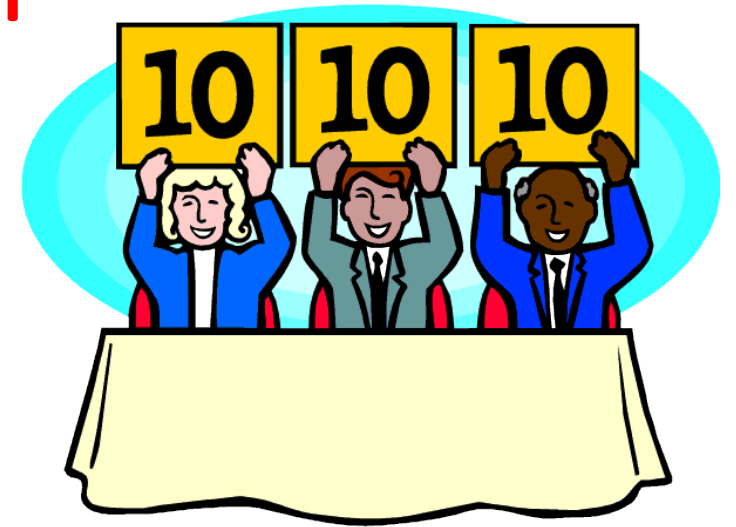
Insert screenshot of simulation



Rules (*Statement of Participation*)

Near-Space Balloon Competition

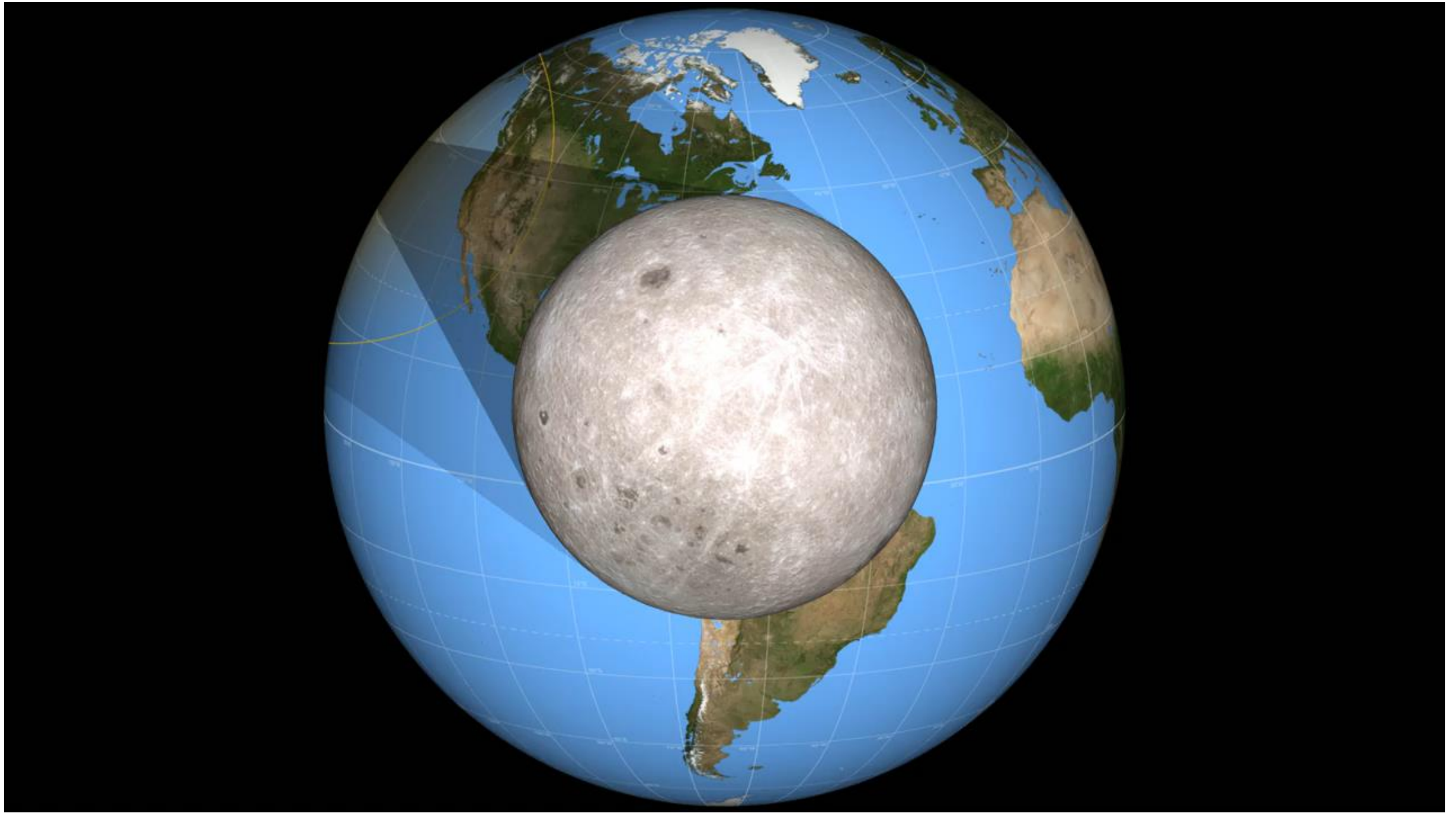
- How judges will evaluate your team:
 - Proposal
 - Integration Night
 - Launch Day
 - Final Report
- Scientific method, creativity, teamwork, execution, and effort levels
 - (not 12th grade team vs. 6th grade team)
- First place team will be able to chose a STEM trip of their choice
- Also...

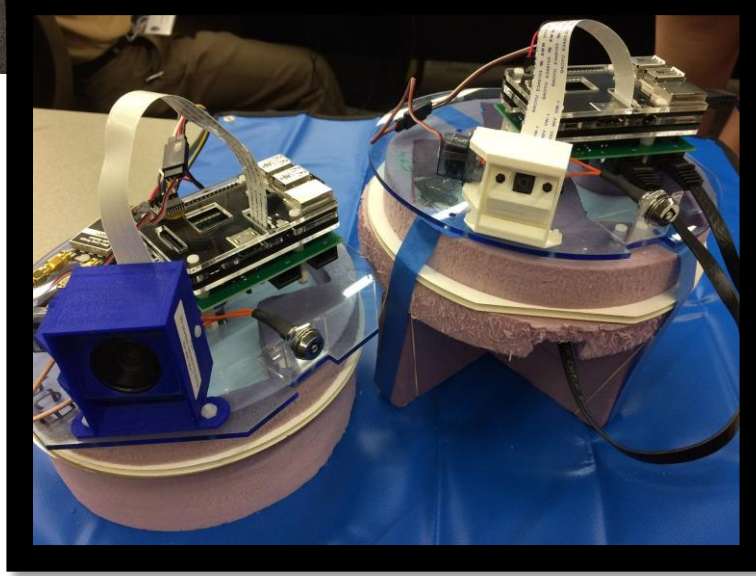


We will fly your payload in 2017!

- TOTAL Solar Eclipse
- August 21, 2017
- Nation-wide endeavor by NASA
- This team will need to give us detailed operation instructions

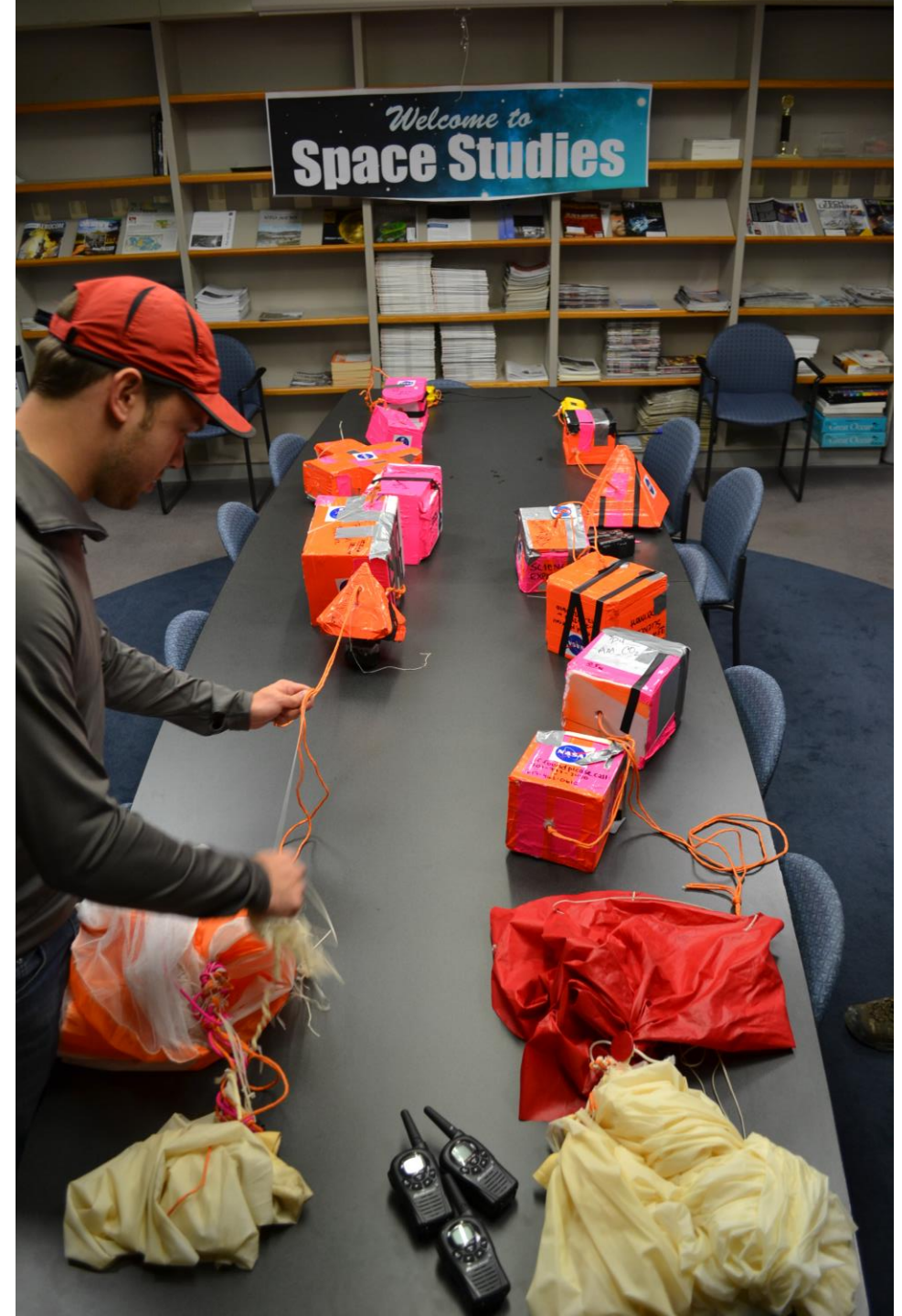






After Your Presentations...

- We'll integrate your payloads into the balloon train (2)
- Record your estimates for burst altitude!
 - Prize for the guess that's closest!
- We'll fill out any last paperwork.
 - See Caitlin or Marissa



Ballooning around the world!



HASP



Space Grant



Planetary



NOAA



**World
View**

HAVE FUN!



October 22nd Practice Launch

- Practice launch in preparation for NSBC.
- Chance for our team to work together and figure out our rolls.
- Fill team.
- Payload team.
- Tracking team.



Fill Team

- Usually consists of at least 3-4 members.
- Helium tank, hose and nozzle.
- Monitor the gauges.
- One person constantly holding the neck of the balloon.
- Scale for weighing the payload train determines how much lift is needed.



Payload Team

- Help design and construct payloads.
- Securing the payloads and making sure they are well sealed.
- Assemble payload train.
- Make sure all trackers and GoPros are turned on right before launch.



