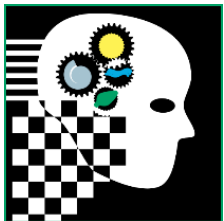




SOLAR CAR CONFERENCE

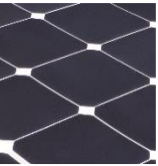
| FEBRUARY 3-5, 2017

| OVERLAND PARK, KS

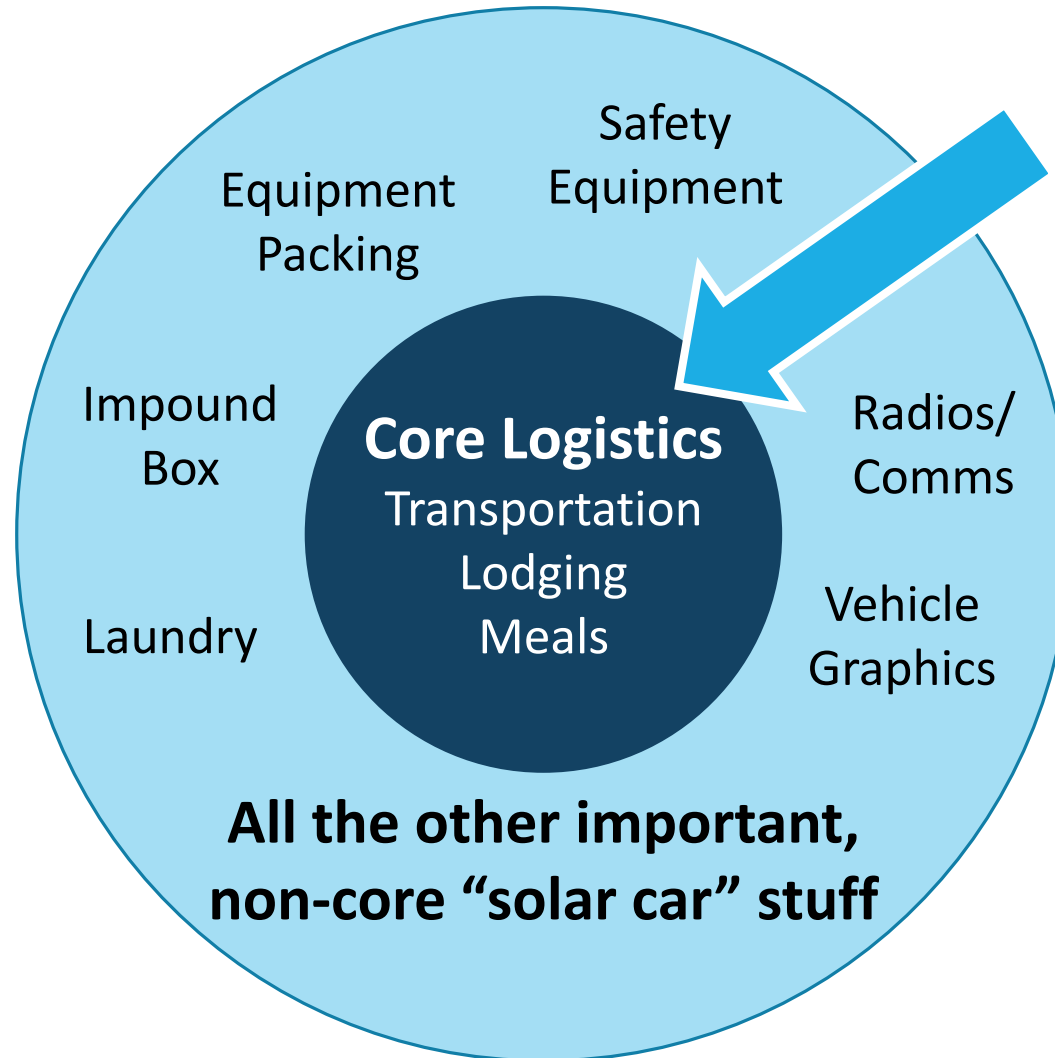


RAYCE LOGISTICS

GAIL LUECK
FEB 4, 2017

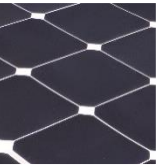


THE LOGISTICS SCOPE



Major Parameters:

- Event Duration
- Headcount



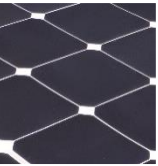
EVENT DURATION

16 days + travel time

Activity	Days
Travel Home to Scrutineering	1+
On-site Registration/Scrutineering	4
Formula Sun Grand Prix	3
“Rest Day” (travel to start line, display, team meeting, prep)	1
American Solar Challenge	8
Travel Finish Line to Home	1+

Keep the same crew the whole time (or swap at the Rest Day)?

Any extra plans before/after the event?

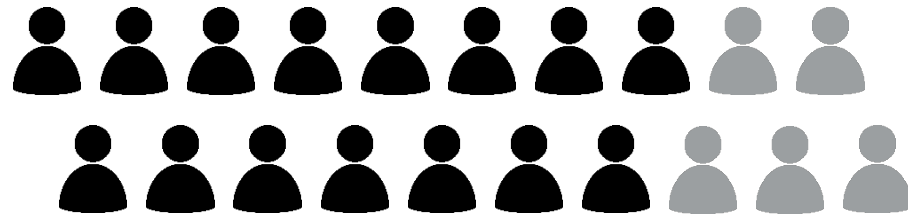


HEADCOUNT

How many people *do you need* to bring?

How many people *would you like* to bring?

How many do you have room for (seats in vehicles)?



people



people



people
(+ Observer)



people

UNDERSTAND YOUR BUDGET

There is value and cost involved with every decision!

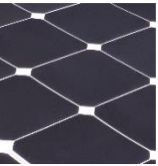
Look at your:

- Daily cost
- Per person cost

Finding a way to save just
\$5/person/day
can yield
\$1800 in savings!

(Assumes: 20 person team, 18 days on the road)





GROUP ACTIVITY

Share and discuss one of the following as a group:

- What has worked well?
- What is a key lesson learned?
- What question/concern keeps you up at night?

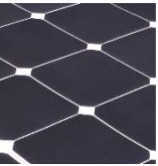
Prepare a 3-minute recap of the best ideas to share with the room.

Group Assignments:

- Group 1: Transportation
- Group 2: Lodging
- Group 3: Meals



TRANSPORTATION GROUP



TRANSPORTATION

Vehicles

- Lead
- Chase
- Truck & trailer
- Others (scout, weather van, RV, etc)

Fuel

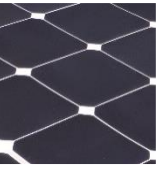
- Determine an average fuel price
- Home to Track to Start Line
- Start to Finish Line
- Finish Line to Home
- Misc (add at least 10-20%)

Misc

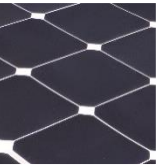
- Insurance coverage
- Flights for those coming later/leaving early
- Overseas travel

Planning Tips

- Vans or large SUVs are recommended for lead and chase to hold people and gear
- If you own your own vehicles, budget for any needed maintenance and oil changes
- See if you can get sponsorship/ borrow vehicles (university, local dealership, etc)
- Most vehicle rentals to people under age 25 incur additional fees; ask before you sign
- If you are thinking about using one-way rentals, ask about one-way rental fees
- Determine credit card or other means for paying for fuel on the road (and method for keeping track of receipts)



LODGING GROUP



LODGING

Hotel

- Expected # of nights
- # of people and # per room
- Cost per night per room

Campground

- Expected # of nights
- Cost per night per person or per site
- Extra charges for extra vehicles

Alumni, family, friends

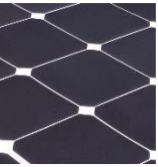
- Free!
- University Alumni Office may have contacts to help arrange options

Large Parking Lot

- Free!
- Ask first to make sure it is ok

Planning Tips

- Make arrangements in advance for the track and stage points (you know where they are and when you will be there)
- Determine your game plan for nights you are in between stage points
- See if alumni, family, or friends want to house the team for a night
- Try to use the same hotel chain and take advantage of reward programs
- Look for hotels that offer other items you are needing
 - Free breakfast
 - Internet
 - Laundry facilities
- Don't forget about your Observer!



MEALS GROUP



MEALS

Food Bill

- Headcount x days x estimated cost

Breakfast

- Free, if included with hotel
- Eat during morning charge time

Lunch

- Eat on the go (in the vehicle)
- Sandwiches, fruit, chips work well

Dinner

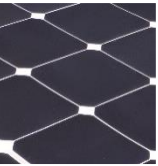
- Eat during evening charge time
- Cook a meal
- Eat at restaurant, if available

Drinks and Snacks

- Plenty of water, Gatorade, juice
- Pretzels, chips, cookies to munch on

Planning Tips

- Individual sized servings are easier to distribute, but cost more
- Look for sponsorship/donations
- Consider food-related items
 - Coolers (1 per vehicle)
 - Ziploc bags (great for sandwiches)
 - Sharpie marker (label bags & bottles)
 - Cooking equipment (portable stove, utensils, etc)
 - Napkins, paper towels
 - Dishwashing soap, wash cloth, towel
- Have a menu that includes items other than peanut butter and jelly
- Minimize caffeine to prevent dehydration
- Be careful of items that may spoil in the heat
- Don't forget to feed your Observer!



SUPPORT INSPECTION

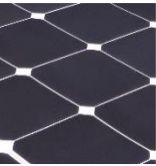
Support Vehicle Graphics & Signage

Radio Communications

Safety Equipment

Road Side Safety Demonstration





OTHER LOGISTICAL TASKS

Packing/Organizing Vehicles

- Equipment
- People
- Observer (and their luggage)

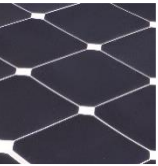
Taking Care of Your Observer

Doing Laundry

Building the Battery Impound Box

Recycling, Carbon Offsetting, etc

Etc...



PLAN A MOCK DRIVE

Goals

- Simulate a real event to workout issues
- Get people comfortable with their roles and used to traveling together

What to include

- Full race crew
- Simulated conditions (set hours, checkpoints, driver changes, flat tires, etc)
- At least one overnight (test out any camping gear)
- Use part of the actual event route (if possible)

Don't forget to include the mock drive (and other practice) in your budget!