9-22-2020 Client Meeting Agenda/Minutes

Tuesday @4:45 via Zoom

4:45 – Team/Client Introductions

- Clients
  - Alistair Smith
  - Doug Hardman
- Instructors/Mentors
  - Mike Maughan
  - Cobi Brower
- Capstone Students:
  - Addie White (BE)
  - Jacob Roy (ME)
  - Kaitlyn Lindholm (BE)
  - Zachary Schirado (ME)
  - Garrett Borth (ME)

4:55 – Project Specifications Discussion

Size	Able to transport on cart(s)
Electric	120 VAC, 15amps or alternative possible battery powered?
Ember Stream Duration	15 minutes without reload
Airflow output speed	0-5.0m/s
Fuel source	Usually woodchips, bark --> hoping for branches/shrubs from experimental forest, shredding device (CNR has one)
Flame source	Usually propane
Ember flow output thickness	Open to design, enough to catch things on fire
Frame material type	No HVAC thin metal, steel thickness that can withstand heat
Safety features	Fuel line, shut down, emergency shut down, fire suppression (dampers to shut down oxygen supply) (something to stop fuel source)
Durability	Vibration resistance, able to transport in bed of truck, fire resistant (temperature?) 600-1200K (repeated heating and cool-> material design)
Budget	$3,100
Other	Useful life: ~200 cycles / a few years

5:10 – Additional Questions for Doug and Alistair

- The project overview states it needs to be able to connect to a wind tunnel in the future, what are the size restrictions of the tunnel?
    - Shoot from ember generator feeds into tunnel
    - Want to blow embers into tunnel, to be picked up by another air stream from tunnel
- Access to the Idaho Fire Lab?
    - Talk to Alistair or Doug for access
    - We are included in COVID access plan
        - Need to wear PPE (masks, gloves)
        - Sign in
        - 6 people max (4 in each room)
    - Off of Troy highway
        - Get directions from Doug
- Additional questions?
    - Timeline: Finished product (at least working) - just after spring break
        - Could be used in senior fire behavior class
    - Involvement
        - Occasional progress report (once a month)