Internal presentation comments:

* Reduce amount of text on screen
* Cut out unnecessary details
* **Make sure to frame every slide with context**
* Ask librarian about finding other material involving reparative 3d printing (back up the claim “we’ve seen researchers focus on algorithms but not testing the material or composite structure”)
* Backup plan!!!

Started out great, the goal was very clear

Questions (by slides):

* Cold Spray slide:
  + The literature shows the lack of FDM for repair
  + Be clear that these are what’s been sure
  + Good example
  + Others could argue that ours are cheap so why do that anyways —> find counter argument
* 3D Non-Planar printing:
  + Do the works of the European group relevant come into play?
* Methodology:
  + Are these the exact geometry?
  + Which is the first and why?
  + P
* What happens if all the facilities are closed
* No “just”
* DED and Cold Spray “leading the charge on repairing existing items”
  + Low quantity high value asset
  + Think of counter to why we would repair 3d printed parts since they’re cheap and fast
* Argument for locating the object on the test bed
* Look at high temperature PLA
* Look at PLAs that “play well together” and one thats hotter
* Experiment tests:
  + 5 in long ¾ in square → 4 hrs @ 25% infill
* Focus on 3 point bend test
  + Change up location of pressure
* 2 ton press from harbor freight
* One test and one test sample
  + Simmer down the number of samples and test cases
  + Increase statistical confidence
* Materials?
  + “A lot of polymers won’t play nice together”
* Order more printers?
* Two different colored filament
* Facility study w/ back up plans

Action items

* Order printer
  + Order different color filament
* Dr. Mitchell wants to see software slicing development and facility sudy and back ups

Current tasks

* Move one from printer construction to facility study
* Move 1-2 from sample spec to facility study

<https://www.repository.cam.ac.uk/bitstream/handle/1810/236995/Design%20of%20Sandwich%20Structures%2c%20PhD%20Thesis%2c%20Achilles%20Petras.pdf?sequence=1&isAllowed=y> - Cambridge study of honeycomb beams

<https://www.businesswire.com/news/home/20200821005392/en/Optomec-Customers-Surpass-10-Million-Turbine-Blade>

Argument for repairing already existing things → adapt to 3d printed objects

Possible argument is to homogenize the loading patterns (just thought of, requires proof and testing)