



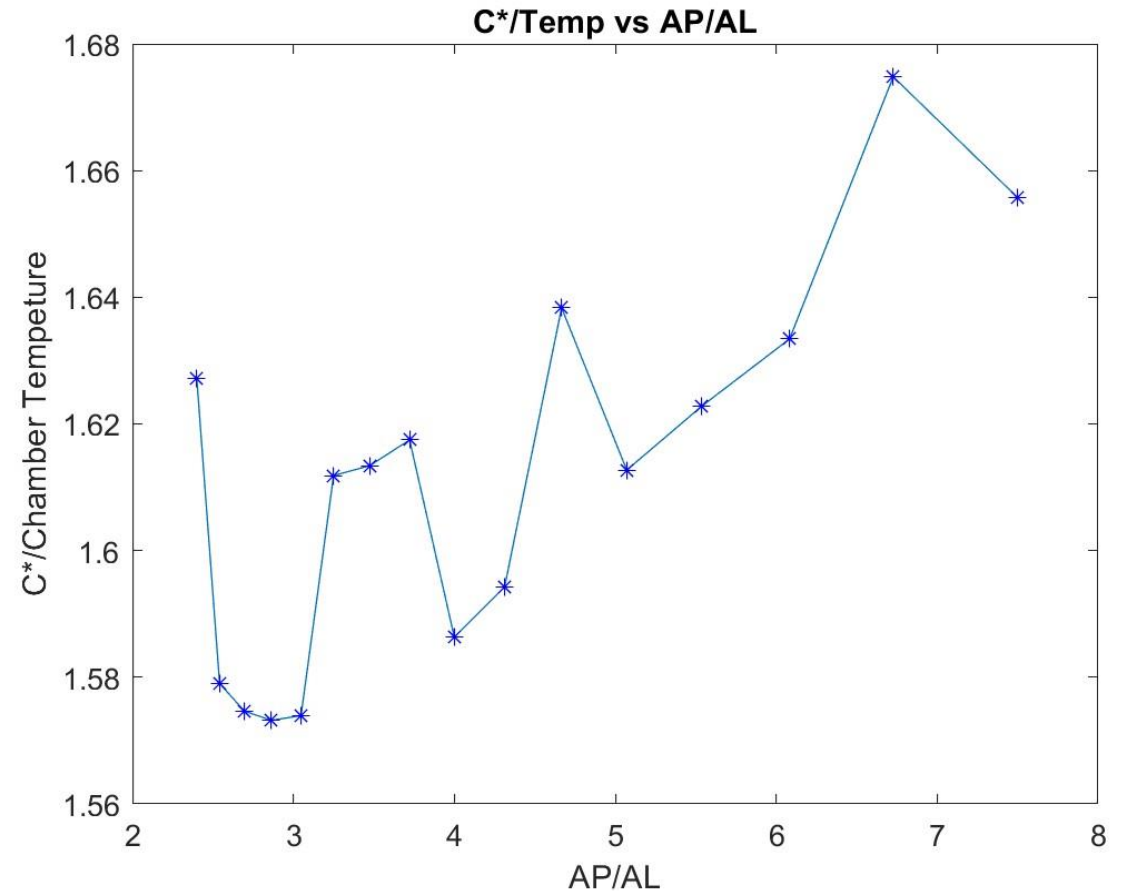
Rocket Propulsion Capstone Prototype 2

GRACE MORRIS, SHANNON
COMSTOCK, REMY DASHER AND
ANDREW KING

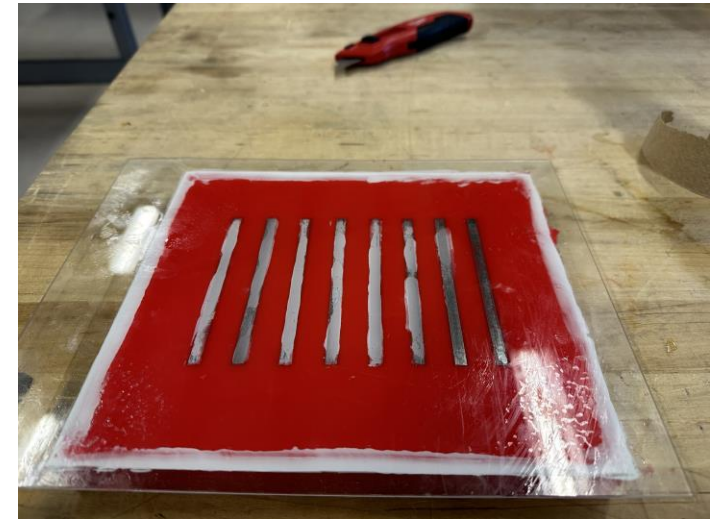
Virtual Prototype

What percentages of AP and AL will we use for our propellant?

- 74% AP
- 11% AL
- $C^* = 5134.267$ ft/s
- Chamber Temperature = 3065.608 K
- AP/AL = 6.7273



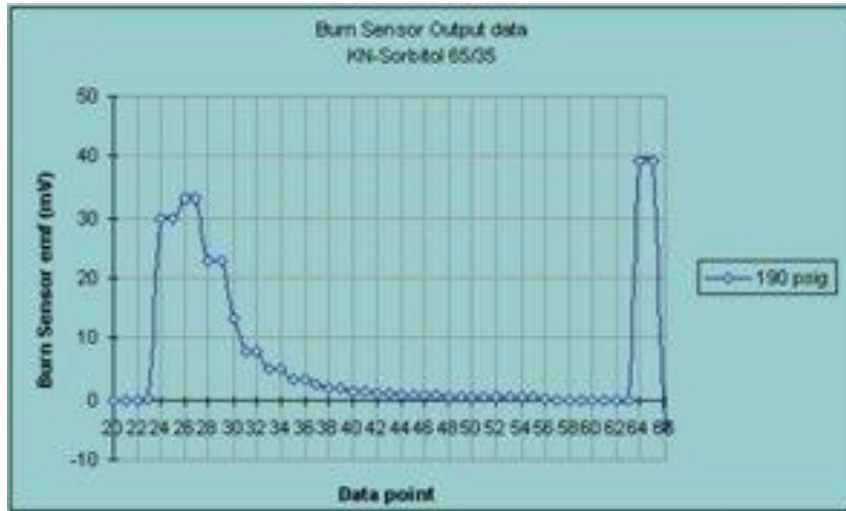
Physical Prototype - Propellant Strands



Strand Burning Purpose



Figure 1 -- Strand Burner



Physical Prototype - Nozzle



Physical Prototype Question & Answer

Strands:

Question: How are we going to cast consistent strands that will go inside the burner?

Answer: Using a known length, width, and height stock, we can cast a mold of them in silicone and have a reusable casting apparatus for all our needed strands.

Nozzle:

Question: Which design (Threaded or Snap Ring) of nozzle should we use as our final design?

Answer: Due to the ease of machining and readily available resources, the snap ring version should be our final nozzle design.



Thank You!
