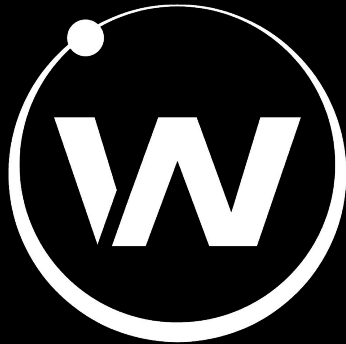
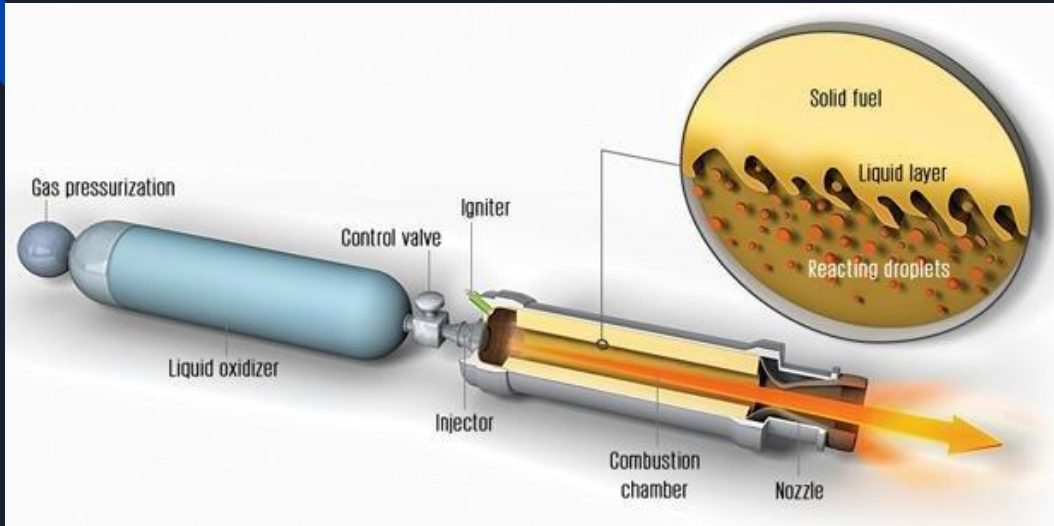




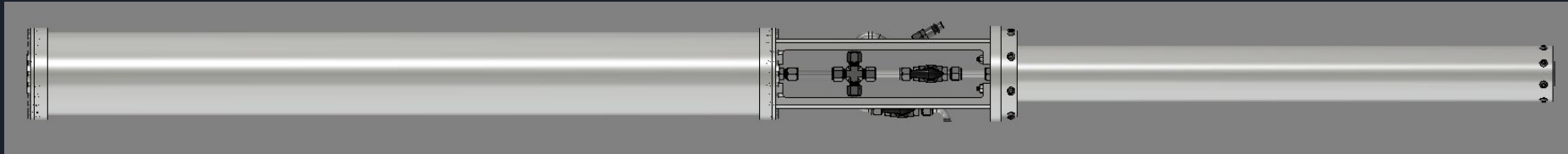
Cronos

A completely S.R.A.D. and open-source sounding rocket.



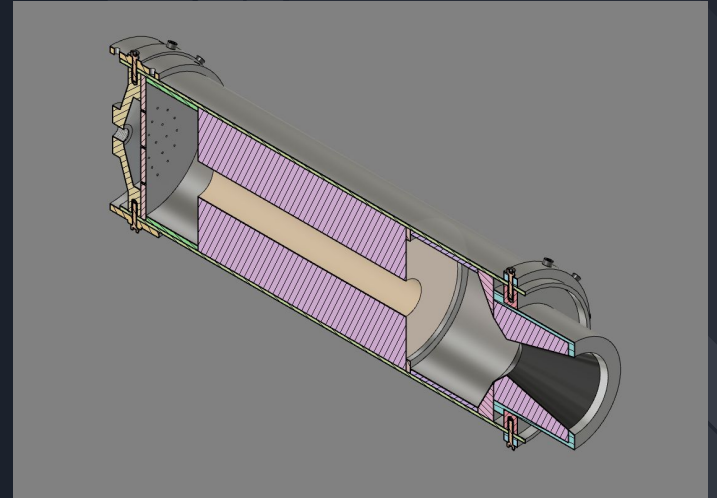
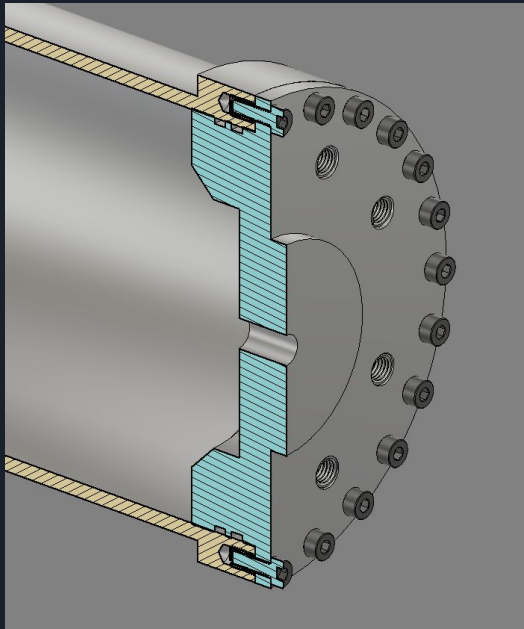


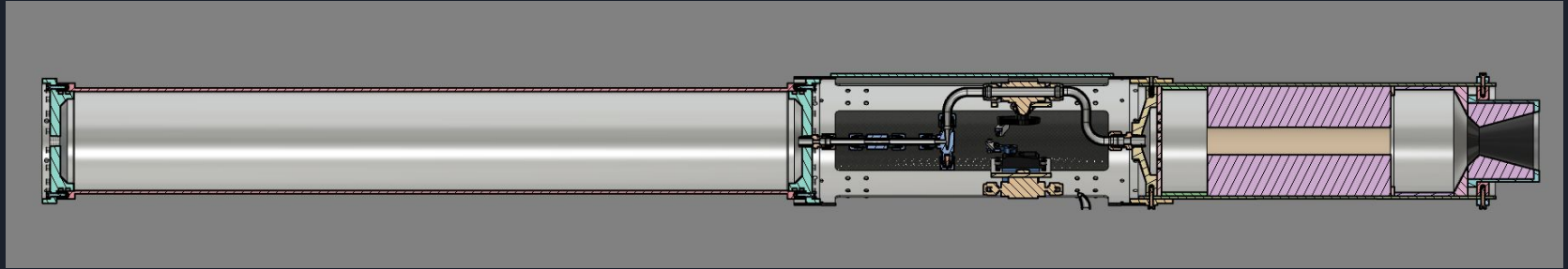
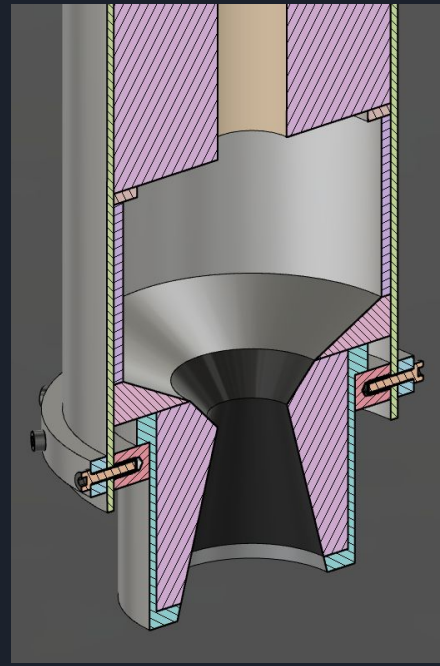
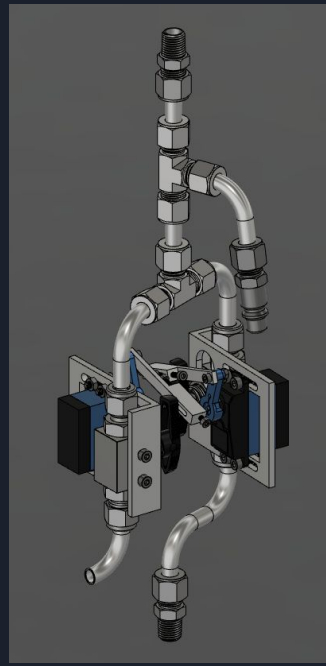
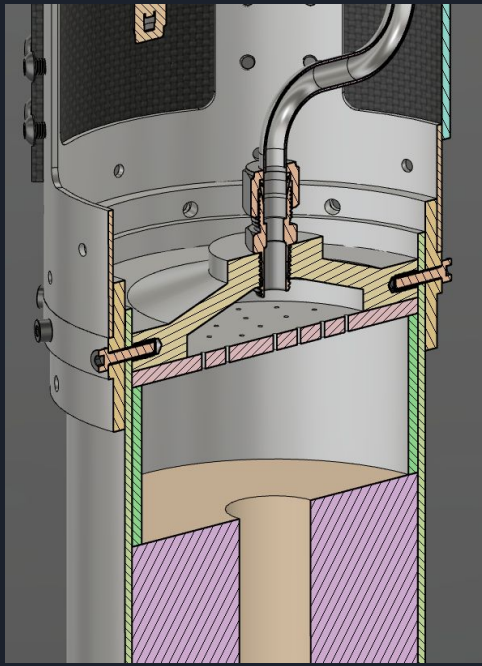
1. Apogee: 3106m
2. Max velocity: mach 0.86 (295m/s)
3. Max acceleration: 10.3 G
(101m/s²)
4. Dry weight: 23.32 kg
5. Net weight: 30 kg
6. Propellants: 5.68kg N₂O, 1kg paraffin.



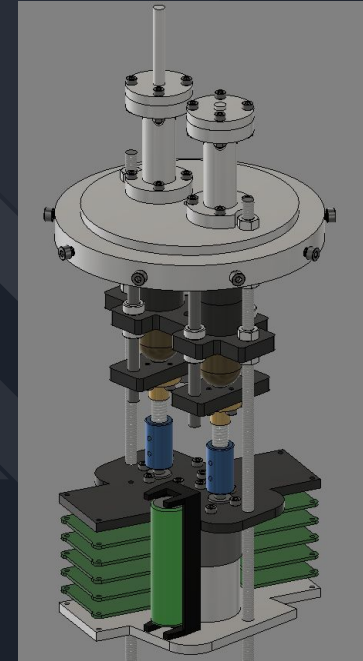
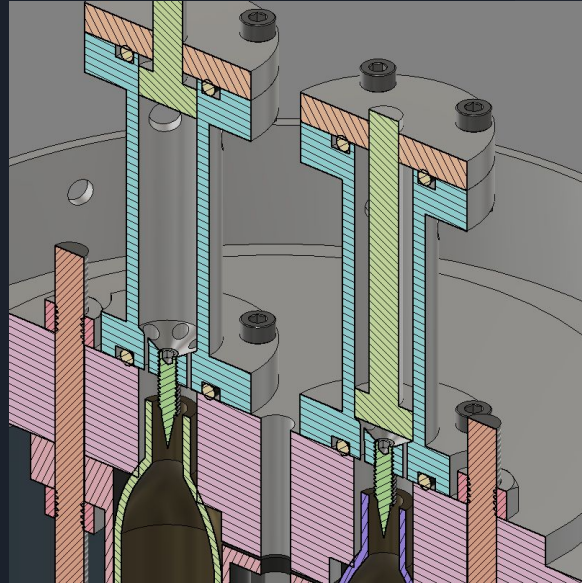
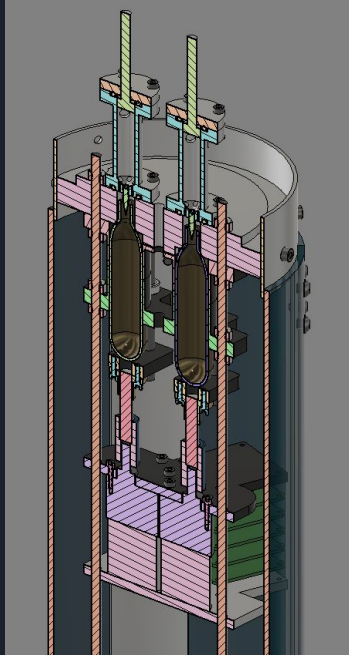
M-3000 MARK 2, Cronos' propulsion system

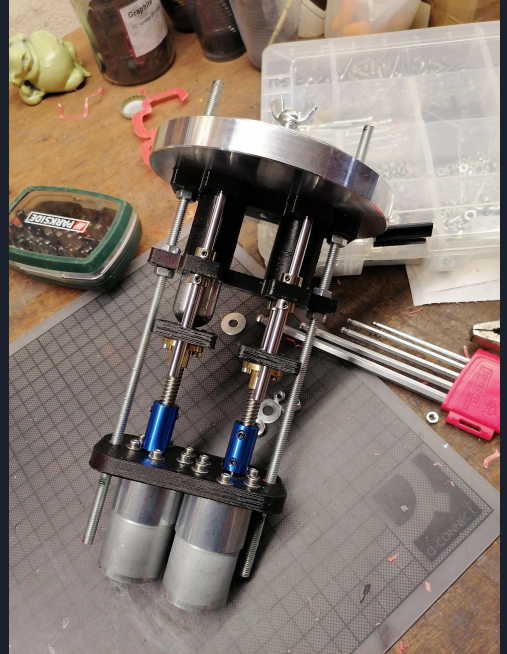
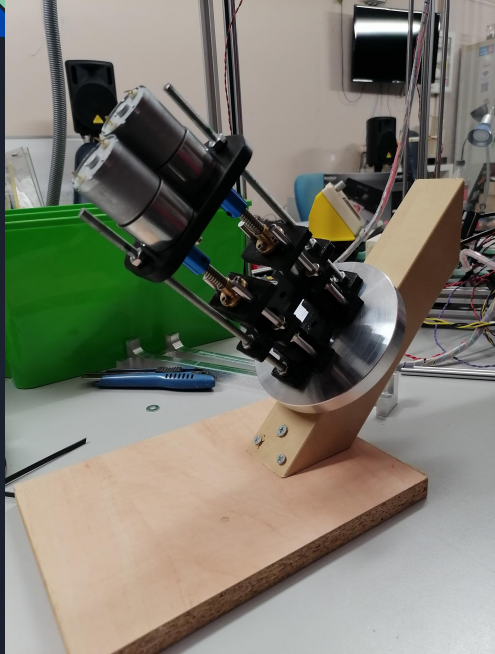
1. Weights 9.36 kg
2. Paraffin and N2O
3. 3000N for 3s



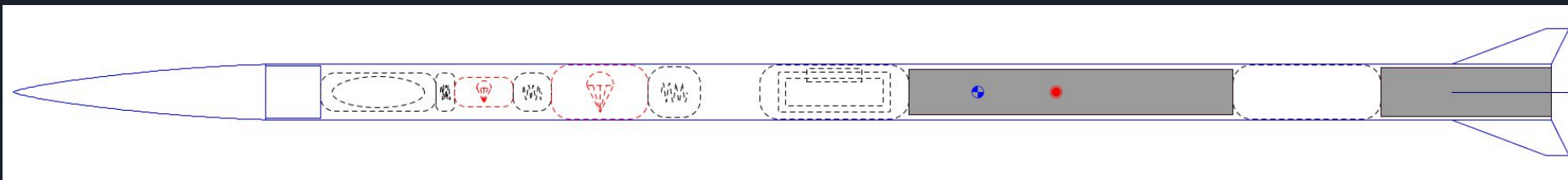
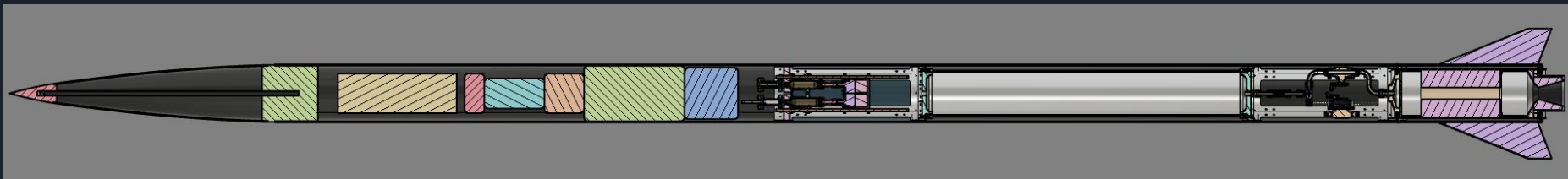


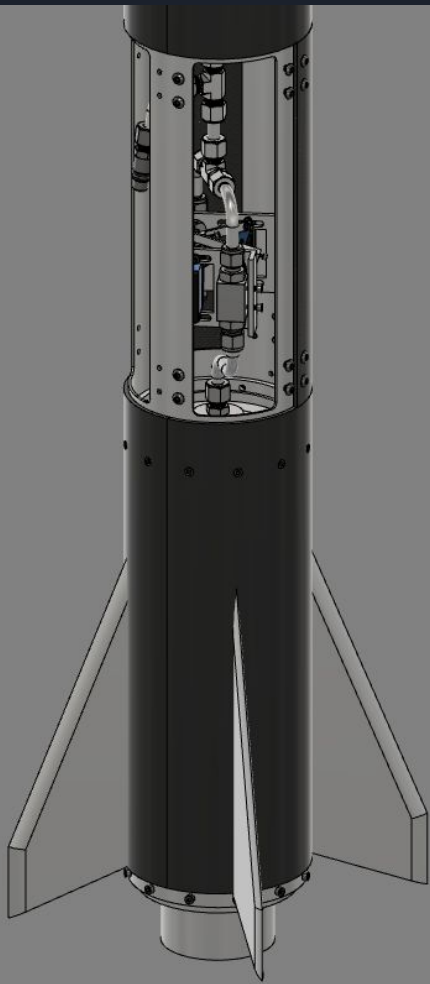
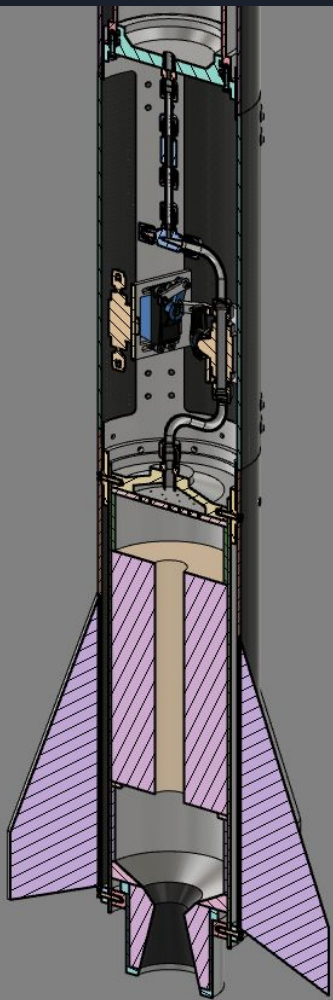
Recovery system / Avionics bay



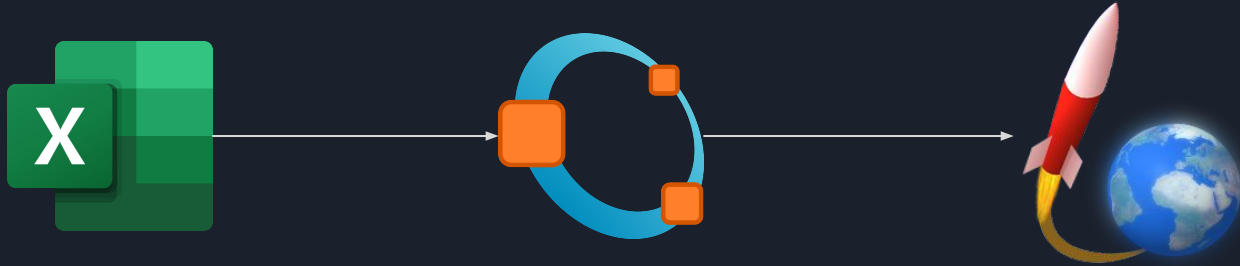


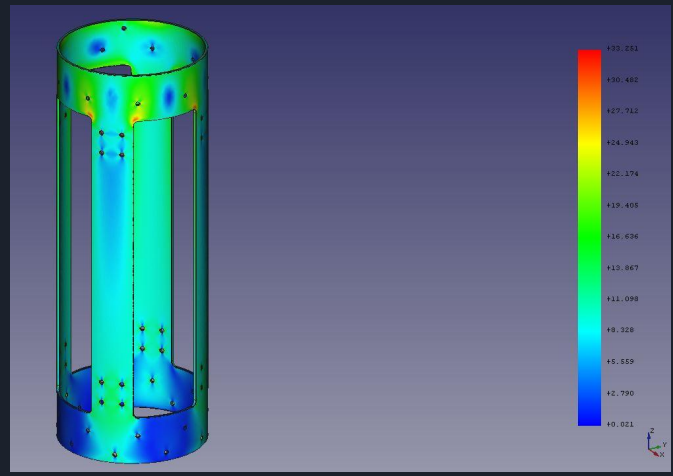
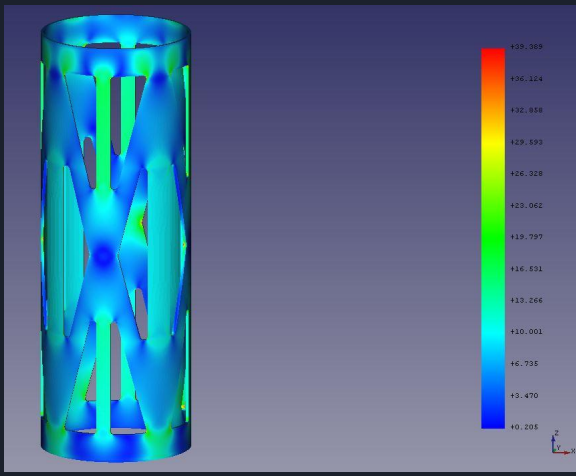
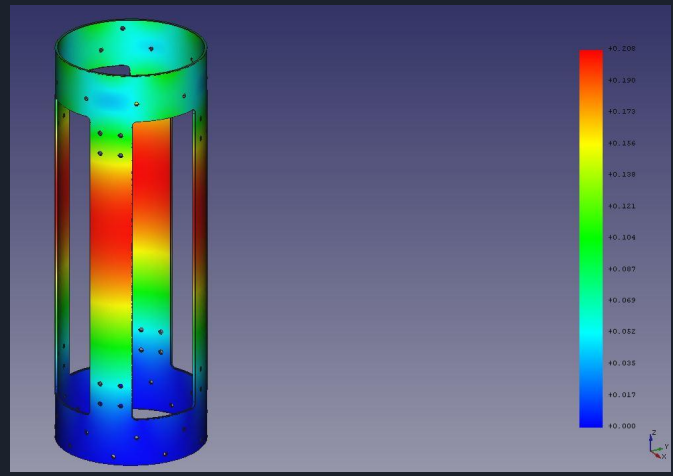
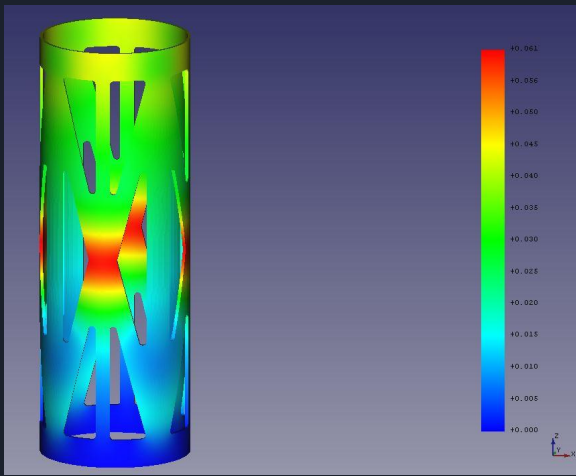
Cronos assembly

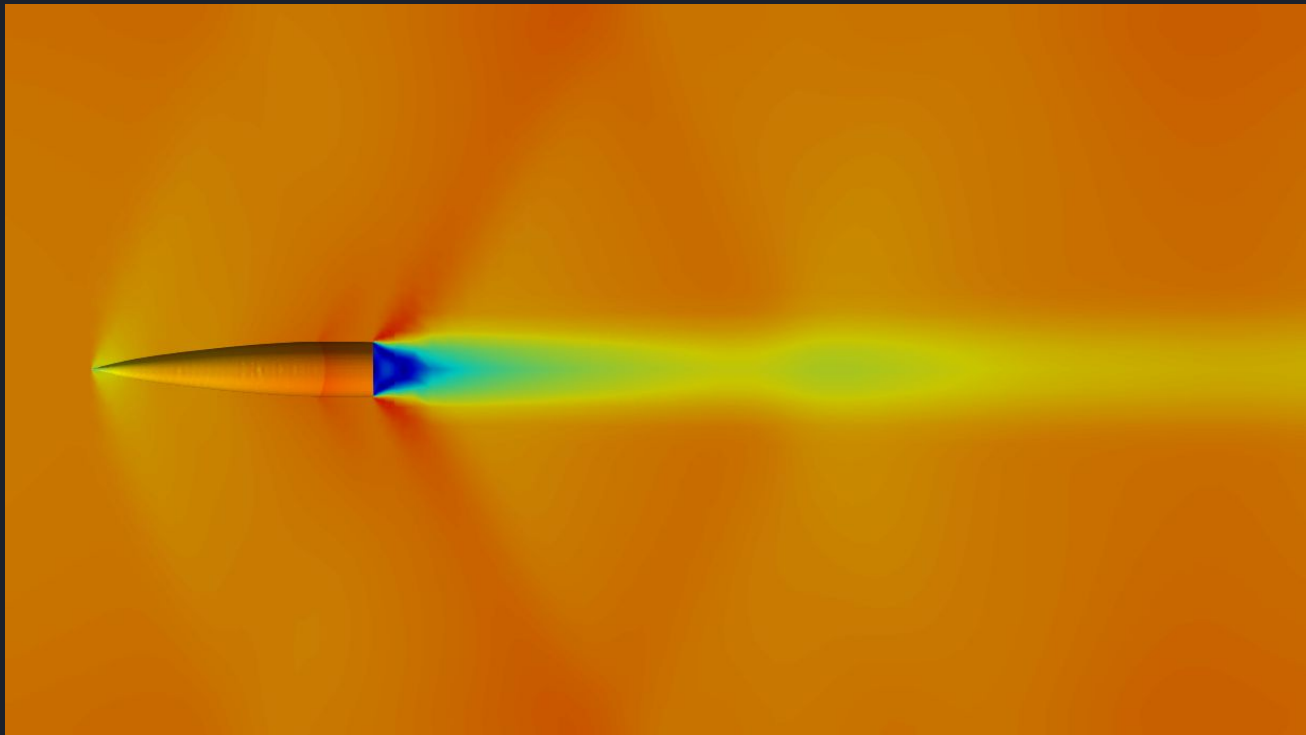


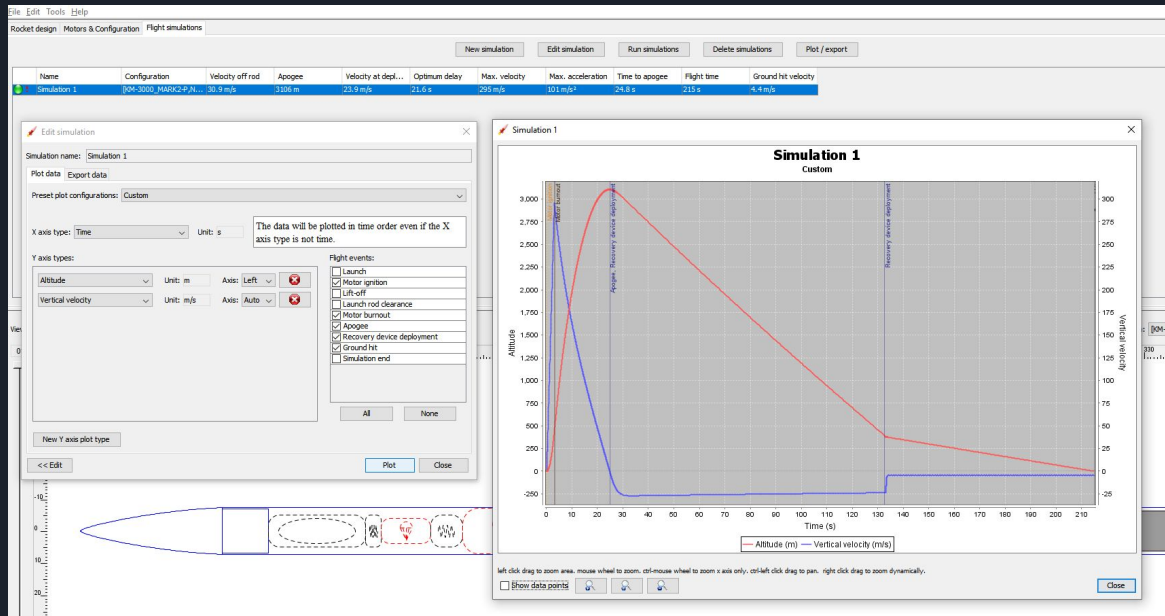


Simulations





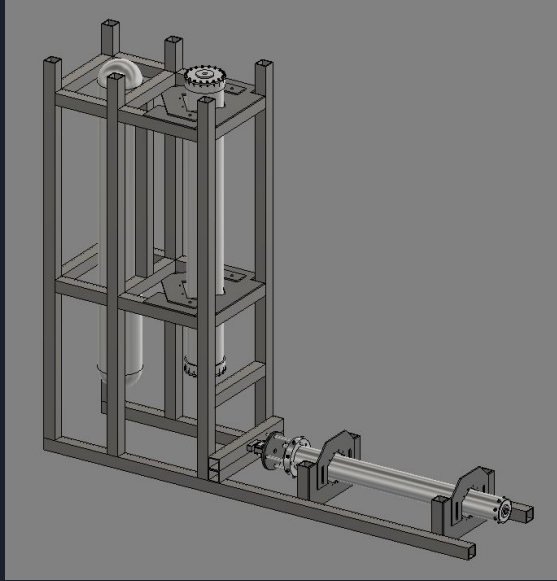




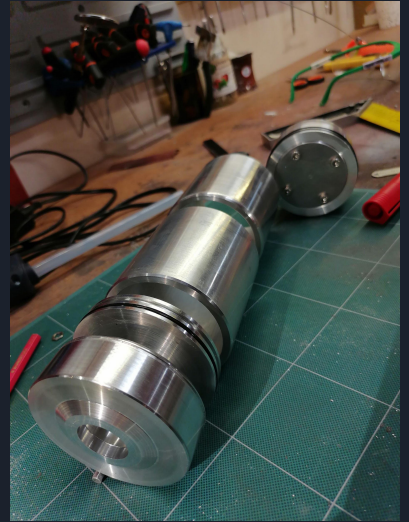
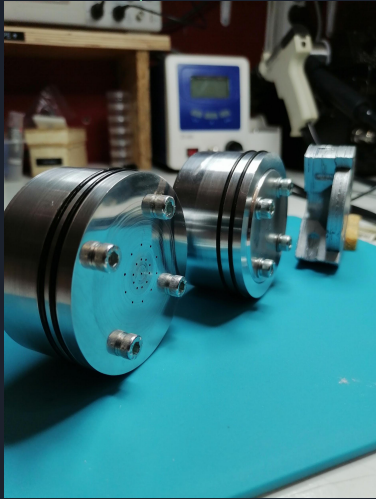
Name	Configuration	Velocity off rod	Apogee	Velocity at depl...	Optimum delay	Max. velocity	Max. acceleration	Time to apogee	Flight time	Ground hit velocity
Simulation 1	[KM-3000_MARK2-P,N...	30.9 m/s	3106 m	23.9 m/s	21.6 s	295 m/s	101 m/s ²	24.8 s	215 s	4.4 m/s

Results (max values)				
AGL (feet)	AGL (meters)	Velocity (m/s)	Velocity (Mach)	Acceleration (G's)
10383	3050	302	0.88	11.49
At 17 feet (rail exit)		30.2		

Test stand



Cool random photos!





Project Cronos