



CDL Technical Presentation

UTS Business Goals

“Bringing Spaceflight down to Earth”

- Enable small spaceflight companies
- Lower cost of space access
- Make Money

Technical Translation

Enable small spaceflight companies

- Near SSTO - Small companies cannot have large organizations to retrieve parts downrange
- Easy Operations - Ideally 1-2 people should be able to perform all needed tasks

Lower cost of space access

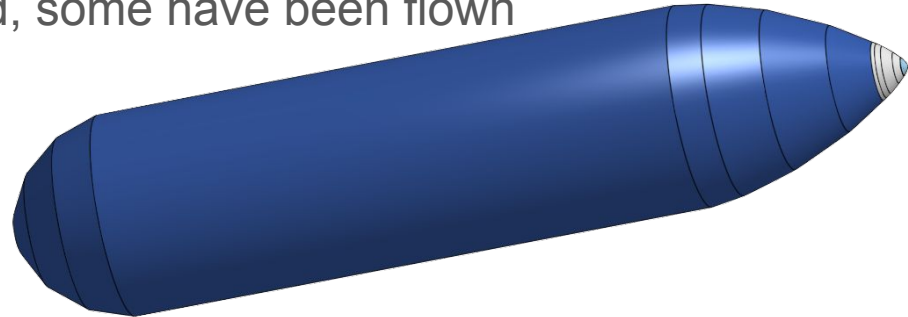
- Use Solid propellant - Cost of rockets is mostly R&D - Solid rockets have the lowest R&D
- Inherent safety - Adding safety to a system by operational limitations is expensive
- Reusability

Make Money

- Repeat Sales

FBR

- Designed to participate in the DARPA Launch Challenge
- Using much of the same technology as the Fluffy Bunny
 - Allows us to flight test our technology at DARPA's expense
- Simple operations
- FAA license application should be somewhat similar to Fluffy Bunny
- About 5 meters tall, weighing 1.3 tons at liftoff
- Currently in construction
- Most systems have been bench tested, some have been flown



Fluffy Bunny

- Our first manned vehicle
- We have built the first prototype
- It has been flown (not under rocket power)
- We learned a lot, and will build a second prototype after the DARPA contest
- Subsonic flight until extreme altitude
- Can lift 10 tons of propellant, prototype weighed 200 lbs, the final version will be lighter
- Takes off and lands in water
- Extremely low infrastructure requirements
- (Flown manned - sort of!)

