We had our second drive day with the 16XT in early March to collect data and do driver training! In order to push the 16XT to its limits, our testing included accel runs, hill climbs, and lots of obstacles!

The data we collected will be used in our future designs, allowing us to be more confident and aggressive than ever before.

The lessons we learned this year about building our first 4WD car will be incredibly valuable as we move into designing our next vehicle – the 17XT!

Due to the 2021 competitions being cancelled by SAE, the 16XT won’t get the chance to be put to the test on the track, but we’re looking forward to more drive days when we get back to campus to continue driver training, data collection, and CVT tuning!
TIMELINE

SEPTEMBER
15x DAQ installed

OCTOBER
16XT design freeze

NOVEMBER
1st build day

JANUARY
Frame welded

FEBRUARY
1st drive day

FEBRUARY
Frame powder coated

MARCH
2nd drive day

APRIL + MAY
17XT design kickoff

ON THE HORIZON

We officially kicked off the design of the JH17XT in early April! We’re looking to capitalize on the lessons we learned from building our first 4WD car and push ourselves to design our best car yet. Our main goals for the year include:

- Quantify Loads Used in Design
- Validate Results from FEAs
- Reduce Overall Weight
- Improve Driver Training
Thank you to Textron Inc! We got the chance to present our first 4WD vehicle to a team of their engineers and got valuable design feedback. The presentation was followed by a tour of our shop and a closer look at the 16XT.

Textron’s support allows us to continue to push the boundaries of our design and challenge ourselves every year. We’re looking forward to sharing our 17XT design with Textron’s engineers in the future!

Meet Alex! He’s a sophomore mechanical engineering student from Boston, Massachusetts. He has worked on the brakes system since last year, and is now the Controls lead designing the steering system. Alex has enjoyed working on the brakes testing rig (pictured) to validate the expected loading conditions and analyzing the pressure in the brake lines.

When not on SOLIDWORKS or building components, Alex enjoys exploring the outdoors and photography!
THANK YOU FOR YOUR SUPPORT!

TEXTRON

JOHNS HOPKINS WHITING SCHOOL OF ENGINEERING

MARS LABS

thyssenkrupp

COMEQ

WSE MANUFACTURING

Bass Machining

Daniko Arlington

Gases & Technologies

MONSTER

Hilliard

Ramsey Products Corporation

MAKERSPACE

RISLONE

ASCo American Stripping Co.

BAR’S LEAKS

EXTREME TERRAIN

DEAN LUMBER & SUPPLY

APL

JOHNS HOPKINS APPLIED PHYSICS LABORATORY

Platform Aerospace

SOLIDWORKS

XSTREAM TRUCKING

Mapc

Central Precision, Inc.

Protein Factory

CarParts.com

KISSsoft