



TEAM HIGHLIGHTS

Design of the JH17XT kicked off in early April and we've made lots of progress so far! While our main focus for last year's 4WD design was building a simple, robust system, we're hoping to refine and tune the 17XT. This includes a major redesign of the drivetrain 4WD configuration as well as changes to the frame and suspension to reduce weight and accommodate the new packaging.

Our biggest challenges this year will include making our first custom differential, validating our analysis of suspension components, and revamping our frame FEA process.



Shop tours with new members in Fall 2019

One major focus for the team this year has been improving our load determination process. Recently, we completed a MATLAB model that uses data collected at our last drive day to calculate the maximum loads experienced by outboard suspension components!



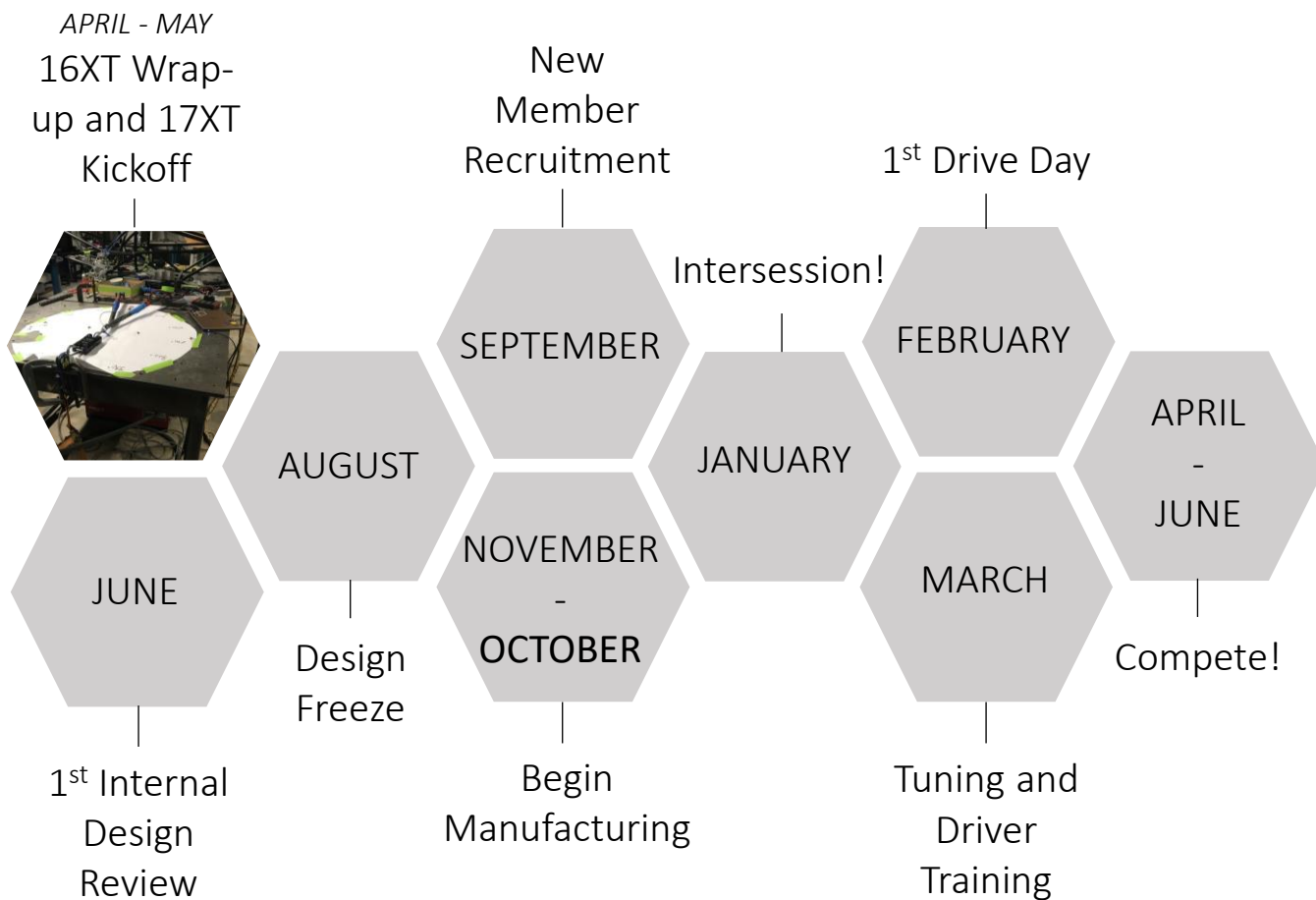
JH11x at alumni weekend

- 26 COMPONENTS
- 22 WEEKS OF DESIGN
- 21 DESIGNERS





TIMELINE



ON THE HORIZON

The design of components for the 17XT is going great! Component designers are beginning to wrap up the CADs and analysis for the first versions of their parts. As a result we will be having our first Subsystem Preliminary Design Reviews at the beginning of July. These PDRs will serve mostly as a setting for the team to get up to speed on each other's designs and, more importantly, as a platform for designers to receive feedback to inform their future iterations!

July

SUN

MON

TUE

WED

THU

FRI

SAT

28

29

30

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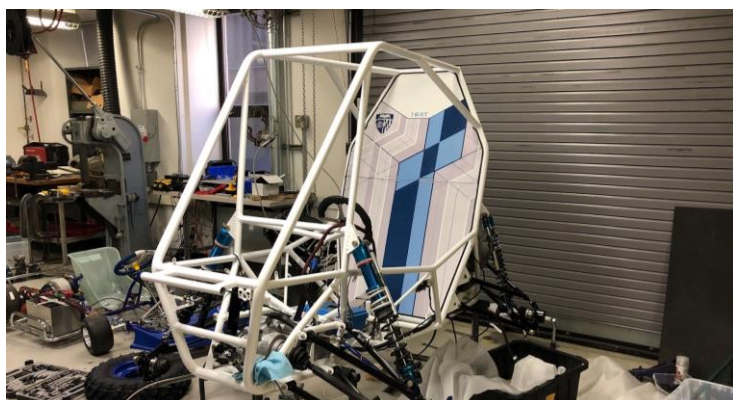
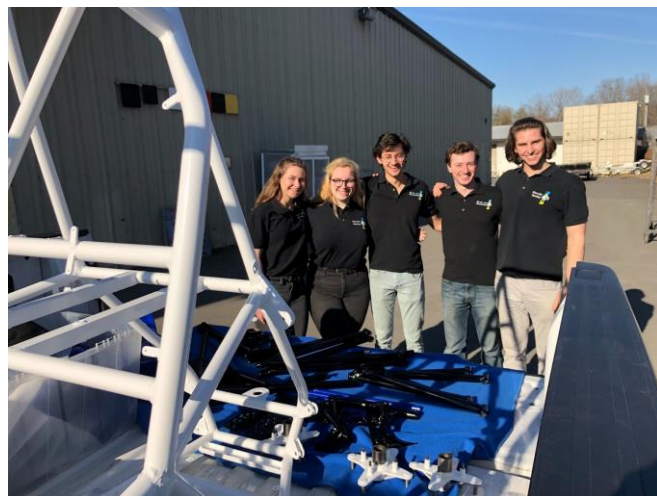
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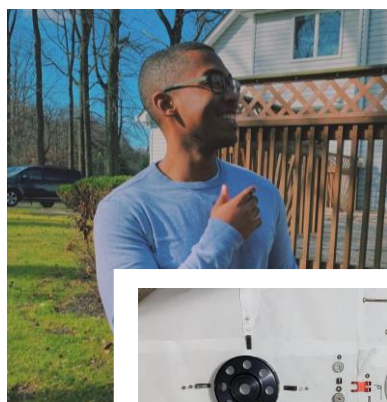
SPONSOR SPOTLIGHT

This month we would like to thank American Stripping Company! ASCo specializes in a variety of finishing processes, ranging from shot peening to metallizing. The team was kind enough to powder coat our frame and suspension components for us, adding some flair and also protecting them from the elements!



The whole team at ASCo was incredibly patient and friendly...not only taking the time to put up with our color selection shenanigans in their lobby, but also giving us a tour of their facility! Thanks to them, the 16XT will be taking to the track in style – for years to come!

TEAM MEMBER SPOTLIGHT



Meet Jack! He's a sophomore mechanical engineering student from Vienna, Virginia. He joined the team his freshman year and spent a lot of time milling and turning an assortment of parts including engine rails, differential mounting rails, and suspension inserts. This year, he's in charge of tuning the team's continuously variable transmission (CVT) as well as designing the CVT's case and shifters for the transfer case.



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JUNE 2020

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