



March 8, 2019

Building Beat

Upcoming ...

Friday, March 8:

Robotics Team competes at Kettering

End of 2nd Trimester for DAE; 1/2 Day for Students

Saturday, March 9:

Robotics Team competes at Kettering

Monday, March 11:

DMS Parent Network Meeting, 6:30 p.m.

Pre-Festival Vocal Music Concert, 6:30 p.m. DHS Auditorium

Tuesday, March 12: 6:30

Siple Elementary PTO Meeting

Wednesday, March 13:

DAE FAFSA Night

Thursday, March 14:

Siple Elementary 4th Grade Musical, 7 p.m.

Friday, March 15: DAE

Report Cards Mailed Home

Friday, March 22 is now a 1/2 Day of School for Students!

Instrumental music programs score big over the weekend

It was a historic weekend for our Davison Instrumental Music groups representing both Davison High School and Davison Middle School at the Michigan School Band and Orchestra Association District 3 Band Festival held Saturday in Swartz Creek.

The Davison Middle School Cardinal Band was the only middle school band to earn straight ones, said **James Bronson**, DMS Instrumental Music Director. The Cardinal Band is comprised of eighth graders.

At the high school level, not only did the Wind Ensemble, String Orchestra, Chamber Orchestra and Concert Band all receive Superior ratings, but the Wind Ensemble received straight A+s from two of the three judges.

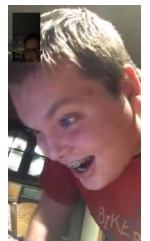
"That is a first in my tenure as director," said DHS Instrumental Music Director **James Schuster**. "One judge is willing to write a letter to the Michigan Music Conference stating that we should be considered one of the ensembles featured at the MMC in 2019 in Grand Rapids."

The judge, John Hawkins, wrote: "This is what is best in music education in the state of Michigan."

The remaining three high school groups received straight As in performance in every category (Tone, Intonation, Rhythm, Articulation and Interpretation).

DHS senior Malachi Bergman is Kettering bound

Malachi Bergman, lead programmer for the House of Cards Robotics Team and DHS senior, recently learned that he has earned a full-ride scholarship to Kettering after placing in the top three in the University's Math Olympiad. Malachi is the second Davison student to be a winner for the Math Olympiad and the first to place in the top 3 and receive the full-ride scholarship. Todd Matteson, DHS Class of 2014, was a Math Olympiad winner during his junior year in 2013. Malachi's mother, Rita Jones, who teaches kindergarten at Siple Elementary, shared this picture of Malachi (above right) that she snapped as he learned about his scholarship.



DMS students, staff participate in 9th year of penny drive

Davison Middle School just wrapped up its 9th year of participating in a Leukemia and Lymphoma Society penny drive. The school-wide goal for LLS was \$2,019. Davison Middle School students and staff together contributed \$2,798.89. Wow! This is impressive since there were only six school days to collect due to weather closings! A big shout out goes to Davison Middle School student Clayton Ex who raised \$727

with online donations! The Leukemia and Lymphoma Society's mission is to cure leukemia, lymphoma, Hodgkin's disease and myeloma and improve the quality of life of patients and their families who need LLS's Patient Financial Aid program. Yearly, this can help pay for medicines, the doctor or other treatment-related expenses. Thank you to the Jr. Optimist Club for hosting such a worthy cause.

A sign of spring; Auto Tech announces date for annual auto show

Mark your calendars for May 17; that will be the date for the annual Davison High School Auto Show. Auto Tech Teacher **Andy Michalik** is already at work securing scholarship prizes for the student competition portion of the show.

Owners of classic cars, rat rods and custom rides are welcome to show off their rides. Watch for more details soon.

Alumni news

Steve Cozart (DHS Class of 2012) was recently featured in a Ford commercial. After graduation, Cozart attended University of Northwestern Ohio, in Lima and then came back to work at DCS as a paraprofessional in the Auto Tech class. He is now working for LaFontaine Ford in Birch Run. He even got paid a nice chunk of change for starring in the commercial (he is the mechanic working on the car). Here is the commercial: https://m.youtube.com/watch?feature=youtu.be&v=87_dK_vsvdk

Briana Kloeckner (DHS Class of 2015), **Jake Ellis** (DHS Class of 2018) and **Bryton Tong** (DHS Class of 2015) have been named to the Dean's List at Saginaw Valley State University for the Fall 2018 semester. To be eligible for the Dean's List, a student must take at least 12 credit hours and carry a semester GPA of 3.4 or better.

Erin Dunlop (DHS Class of 2015) was named to Albion College's Dean's List for the Fall 2018 semester. Students named to Albion College's dean's list must have a cumulative GPA of 3.5 or above, while taking four graded courses. Dunlop is majoring in English-professional writing and political science. Dunlop is the child of Susan Dunlop of Davison.

Katherine McCall (DHS Class of 2018) was named to Trevecca Nazarene University Dean's List. A graduate of Davison High School, McCall is pursuing a Bachelor of Arts degree. To be named to the Dean's List, undergraduates must attain a semester grade point average of 3.50 or higher on a 4.00 grading scale. Traditional undergraduates must be enrolled full time, while non-traditional undergraduates must have completed 12 or more hours between July 1 and December 31, 2018.

Miranda Strobl (DHS Class of 2017) and **Joseph Nealis** (Class of 2016) have been named to the Cedarville University Dean's List for Fall 2018.

Morgan Deckrow (Class of 2018) is a new member of Albion College's Lisa and James Wilson Institute for Medicine. The Wilson Institute supports and prepares students to be exemplary and altruistic physicians, dentists, veterinarians, and other healthcare professionals. Through an innovative academic curriculum and immersive clinical, research, and community service initiatives, our Wilson students become leaders in healthcare. Deckrow is a first-year student at Albion College. Deckrow is the child of John and Stefnie Deckrow of Davison.



Gates Elementary celebrates the birthday of Dr. Seuss

Each first-grade classroom at Gates Elementary participated in an activity based on one of Dr. Seuss's books to celebrate the author's birthday March 1. In Mrs. Faith Canning's class, students created pockets for their wockets, Mrs. Erica Thwing-Medbery had students create an elephant that used their arm as the trunk after hearing "Horton Hears a Who." Mrs. Bridgette Massaro read "Ten Apples on Top" and then had students do a math/drawing activity. Mrs. Rebecca McConnell read "Fox in Socks" and students created their own socks and Mrs. Melvina Lightfoot offered a "Hop of Pop" activity where students used words printed on popcorn-shaped paper to create rhyming words. And no birthday celebration would be complete without a visit from the Cat in the Hat (Mrs. Brianna Book) who read to the students.



First stop is Kettering University March 8, 9

House of Cards Robotics Team begins season

On a wintry Monday morning when many of their counterparts were still home in bed, members of the Davison High School FIRST Robotics Competition (FRC) House of Cards Robotics Team #3534 were up and busy milling about several classrooms at Davison Alternative Education. Despite it being a holiday, which meant no school, students were focused and happily at work designing and building this year's robot for their upcoming season.

"It's almost like a family," Davison High School senior **Jared Bearup** said about being a member of the team. "It helps you connect first with others from school but it is also acknowledgment for your work through STEAM (science, technology, engineering, arts and mathematics.)"

"You really do feel a connection," added **Emillee Lane**, a junior who joined the team last year. "I wasn't even sure if it was something I wanted to do, but it's not really just all about the robotics build. There's a business side to it and logistics. It's not just for kids who have an interest in engineering."

From the minute they learn about this year's competition guidelines at the "Big Reveal" to the final "Bag and Tag" Day, students and their mentors have six weeks to design, build and program a robot worthy of competing in the season's games. Within that six weeks, students met from 5:30-9 p.m. each weeknight and 9 a.m. to 9 p.m. on Saturdays and even on holidays like Martin Luther King Jr. Day.

"At the end of the six weeks all teams must put their robot in in a large plastic bag and zip tie it shut until the team's next competition," said **Louis Renner**, Davison High School's Woods Teacher and sponsor of the House of Cards Robotics Team. "In the first couple of days, all it is is strategy talk and no design. After that we sit for a couple of days and come up with our designs and what we can and can't manage to do as a team in the allotted time."

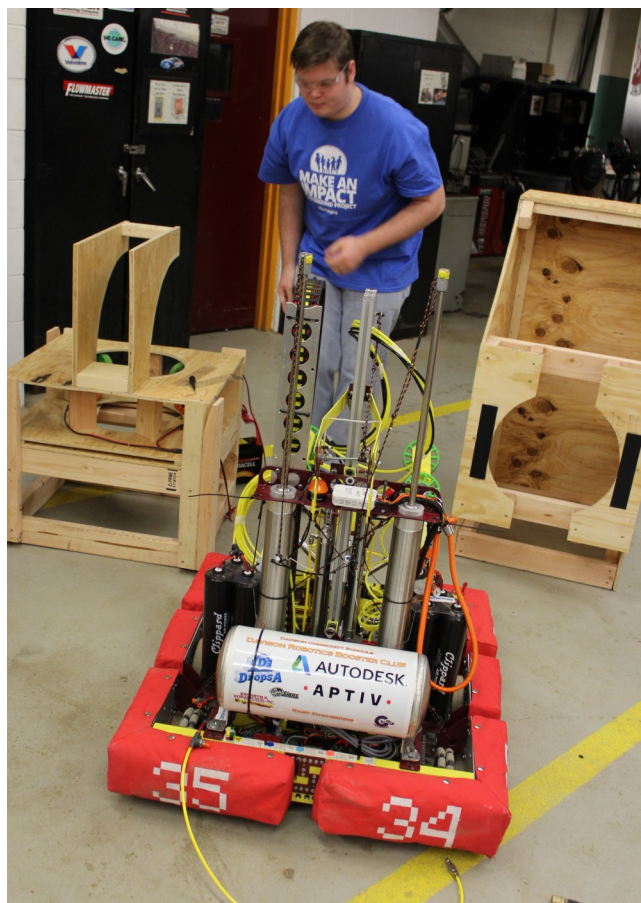
Renner said by the start of week two, students and their mentors are ready to begin the CAD (Computer Aided Design) work and create the field elements needed for practice. Chassis work and building of prototypes take place during week three while students begin to concentrate on the more complicated systems for the robots in week four. Week five is reserved for the finishing touchups on the practice-bot (P-bot) and work starts full swing on the building of competition-bot.

In the final week, Renner said the Programming and Drive teams work with P-bot while the rest of the team finishes C-bot.

"Our team does build two fully functioning and identical robots," Renner said. "Our P-bot or practice bot is the first one we build (and hopefully make all our mistakes on). C-bot or competition robot is powder



Emillee Lane and Andrew Meikle are members of the Davison High School House of Cards #3534 FIRST Robotics Team. Below, Davison High School senior Malachi Bergman is the lead programmer for this year's team.



coated and brought to the competitions. The reason we make two is because C-bot has to be put in the bag but P-bot can stay out so we can practice with it.”

The year’s competition scenario is a race between two alliances of deep space travelers to place hatch panels on their rocket and cargo ship, load valuable cargo for transport off the planet, and return to the safety of the habitat all before the next Sandstorm sweeps through.

The House of Cards’ competition dates are March 8 and 9 at Kettering University and March 29 and 30 at Marysville. The team’s goal is to make it to the World championships once again this year.

Renner said spectators are welcomed and encouraged to attend the competitions.

“The more the merrier,” he said.

House of Cards team member **Andrew Meikle** said competitions are not like the cutthroat competitions you see in the movies about robots cutting up or tearing apart other robots. In fact, the setting is professional and teams offer encouragement, and sometimes even aid, to each other.

“It’s kind of more of a give and take,” Emillee explained. “It’s called gracious professionalism.”

Maybe it’s that mindset that is so appealing to its members, mentors and followers. And one of the reasons why the team continues to grow.

“The team has expanded in so many ways imaginable,” Renner said. “In years past, we pulled in anyone onto the team; we had no limits to team members. But we’ve had to start making students apply for the team and have a limit of 30 now. This allows the students to explore all the different aspects on the team and everyone has their own place on the team.

“The team has not only increased in size, but also in responsibilities. Team 3534 is well known to people in the community. We do so many things outside of just building robots now, it’s like we’re a small business. We have even started youth robotics teams within our community. They learn and master these skills at a younger age, and when they join the high school team, they already know the ins and outs. We are getting better and better every year.”

While not all members of the House of Cards plan to pursue careers in engineering, those who do can apply for scholarships. **Malachi Bergman**, lead programmer for the House of Cards and DHS senior, recently learned that he has earned a full-ride scholarship to Kettering after placing in the top three in the University’s Math Olympiad.

Meet the House of Cards Mentors

A very special thank you goes to these individuals for their dedication to the students and district.

Chris Purdy - Lead Mentor/Coach

Chris is the driving force behind the success of the team. He simply has a great skill set that is diverse enough to work with top business leaders down to the 8th grade students involved with robotics. Implementation of annual improvements and updates has allowed this team to compete with the best in the state.

Tom Hazel - Tom joined when his son was a senior on the team in 2016. That was the year where everything came together and the team just excelled at each event, culminating in the first trip to FIRST Worlds Championship in St. Louis. Tom brings a solid foundation in design/mechanical prototyping and building competencies that produces a far more robust and stronger robot each year.

Jason Craft - Also joined team in 2016 along with his son who had participated for two years in the FRC program at DMS. Jason has guided our programming team during the last two years, helping to integrate pneumatics into robot design and is more involved with holding our students accountable in team activities.

Chris Johnson - The teams’ CAD guru... Now in his second year with coordinating the students in documenting design in CAD. This helps immensely during the build season and into the competition season.

Pete Schnieder - has worked with the FRC team for three years. He is a key reason why the FRC teams have qualified for the Michigan State Championship over the last two years. Pete is now in his second year participating with the high school team along with this daughter.

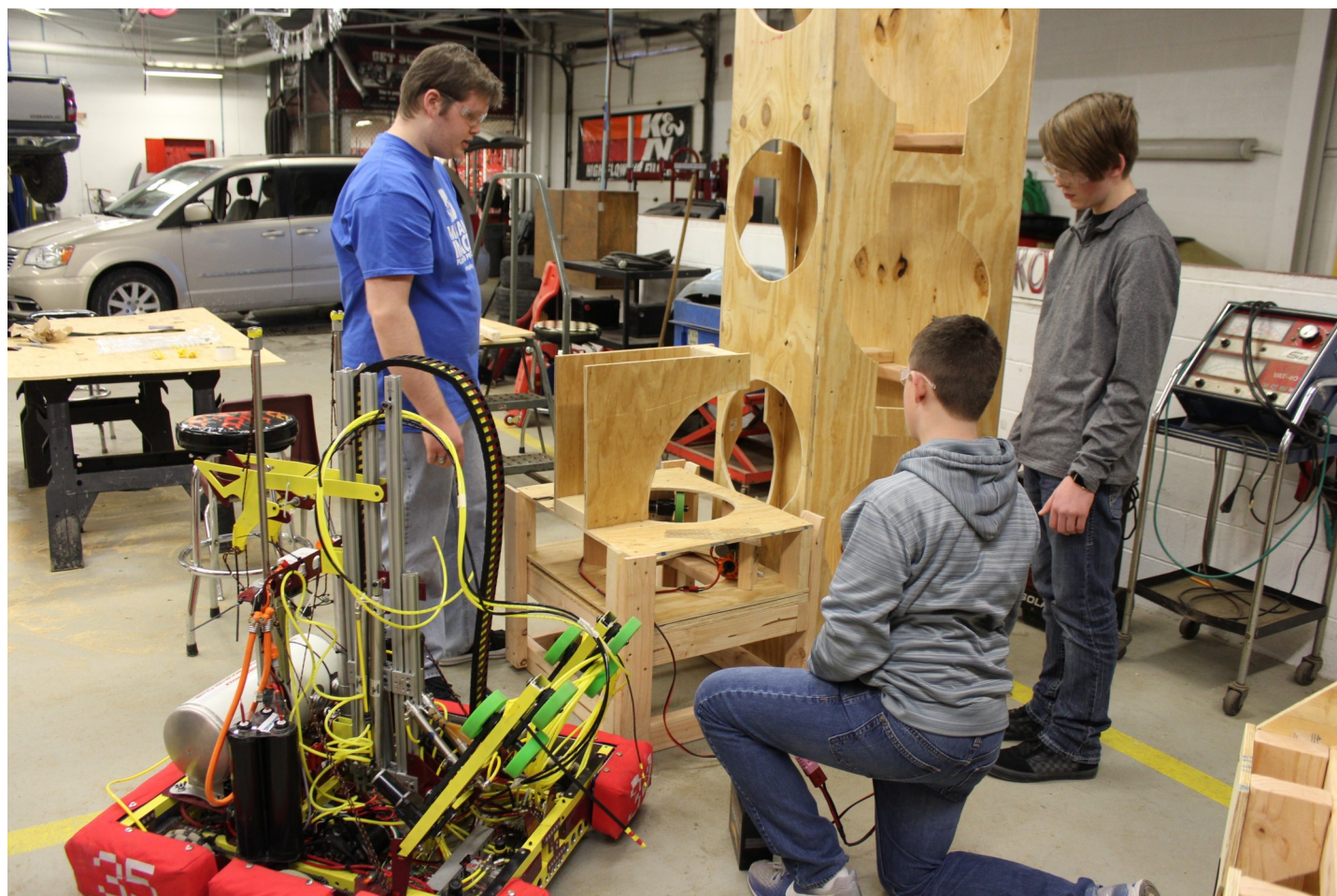
Malachi's mother, **Rita Jones**, teaches kindergarten at Siple Elementary. This year, she co-founded the Stardinals Robotics Club at Siple along with Principal Christy Flowers.

"I'm very, very passionate about this and what robotics has done for my son," Jones said at a Board of Education meeting in February. "I'm extremely proud, blessed and grateful to all of the "village" it has taken to help my son achieve this."

Along with the students, adult mentors like **Chris Purdy, Chris Johnson, Tom Hazel, Jason Craft** and **Pete Schneider** have spent an enormous amount of time sharing their expertise and even their own money. Parents have also formed a Davison Robotics Booster Club to assist the team. Not only does the team need money and materials to build its robots, but fees to compete can add up to \$5,000 just for the entry fee. That does not take into account travel costs.

"We wouldn't be able to do this without them," Emillee said. "Without the parents, the Booster Club, our mentors; we wouldn't be where we are today."

"This team is definitely more than just robots," Renner said. "We are moving forward in ways we would have never thought possible when we first started up this team. Not only have we moved forward with the team, we have moved forward as people. The students learn valuable life skills during the months of the robotics season. We have really developed into a family more than just a team."



Team members work on this year's build for the FRC season.