



Cameron Kaminski & Mountainside Robotics Teacher Dave Neale

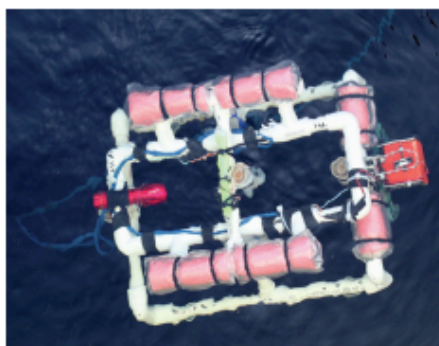
Walkie-Talkie Submarine Rescue

STEM Education-Workforce Partnership at Work

It all started on a field trip to the Spokane County Regional Water Reclamation Facility last January. That is where Cameron Kaminski, an 8th grader at the time, along with other members of the Mountainside Robotics Club, learned about a walkie-talkie that fell into a 20' clean water tank in 2012. On the bus ride home robotics teacher Dave Neale envisioned a rescue and said, "I believe we have a new project. Let's engineer and build a submarine."

The design phase started as a team effort but over time Cameron became the sole project architect. His submarine design included a square PVC pipe frame, three up and down and two back and forth motors, plus a separate motor for the claw arm, all operated by toggle switches. Vacuum-sealed pool noodles were added to help with buoyancy and motors were encased in waterproof film canisters that were filled with wax. To provide visibility a camera and lights were installed and connected to the submarine computer operating system.

All spring . . . before school, after school and during lunches . . . Cameron worked on the submarine. On weekends he took the sub home to test operating systems and practice navigation techniques in the family backyard pool.



The first rescue attempt took place on June 9th but was unsuccessful because of a camera malfunction. Undeterred, Cameron went back to the drawing board, tweaked the design and fixed the camera problem.

Confident he could extract the walkie-talkie if he was able to find it, Cameron made a second rescue attempt on August 29th. Forty-five minutes into the rescue,

utilizing a precise grid search pattern, he found the radio lying very close to a metal gate. The gate proximity complicated the extraction process but with patient maneuvering the submarine's claw secured the walkie-talkie and it was quickly raised to the surface. Commenting on this successful mission Cameron said, "I am super happy! I am glad it actually worked and very excited we were able to locate and rescue the walkie-talkie."

We congratulate Cameron, who is now a 9th grader at Mt. Spokane High School, on this very impressive accomplishment and thank Spokane County and Dave Neale for providing opportunities like this for students to solve real world STEM-related problems.

INSIDE THIS ISSUE

STEM Forward Tour	2
Construction Update	3
Superintendent's Message	4

2016 School of Distinction



Principal Bruce Olgard (middle) pictured with Dr. Kevin Peterson & Dr. Pam Veltri

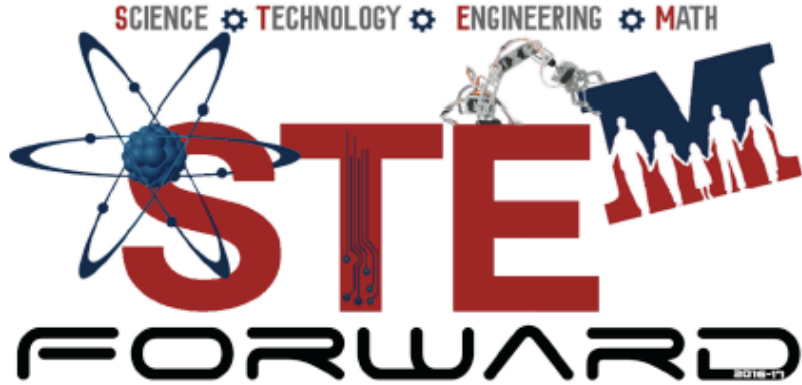
Congratulations to Five Mile Prairie students and staff. For the 5th time in the past six years they have earned a School of Distinction Award. This award recognizes outstanding improvement in reading and math, sustained over a five-year period of time. Statewide 94 schools received this award. Five Mile Prairie is one of two Mead School District parent-partnership schools.

Cat Scramble 2016



For the past 16 years the Cat Scramble Golf Tournament has raised money to benefit the Mead High and Mt. Spokane athletic programs. This year's event raised a record \$61,300, which the two schools will share. Over its history this fundraiser has produced approximately \$412,000.

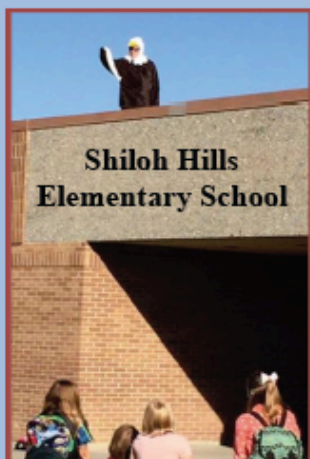
Six Upcoming Tour Events



Envision Your Future in STEM

- **Event #1: Friday, December 9**
STEM Forward @ Mobius, 6-8 pm
Open to 7th & 8th grade students accompanied by an adult.
- **Event #2: Friday, January 27 (tentative)**
STEM Forward @ WSU Spokane Health Sciences, 6-8 pm
- **Event #3: Tuesday, February 7**
Mead School District STEM Night @ Mead High, 6-8:30 pm
Featured Speaker: NASA Astronaut Dottie Metcalf-Lindenburger
- **Event #4: Saturday, February 11**
Mead Bridge Building Competition @ Mt. Spokane, Finals 11 am
- **Event #5: Saturday, February 25**
Mead Robotics Competition @ Mt. Spokane, Finals 12:30 pm
- **Event #6: Friday, March 17**
STEM Forward STEMpllosion @ Whitworth University, 6-8 pm

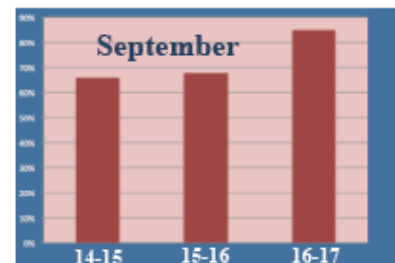
Visit www.mead354.org for Additional Information



Eagle Eye on Attendance

Shiloh Hills Elementary and Principal Laura Duchow are intently focused on improving student attendance because being at school each and every day is critical to learning.

To do this Shiloh Hills has implemented a host of attendance incentives including the Shiloh Hills Eagle (aka teacher Steve Hare) who regularly perches on the roof to watch for students as they come to school. Last year the school's attendance percentage increased each month, when compared to the prior year, and in September of this year attendance was 85% . . . an increase of 17%!



Northwood Construction Update



On Schedule & On Budget

Even with record-breaking rainfall in the month of October, the Northwood Middle School project is on schedule with an anticipated completion date in early 2018. The new gym box is complete with roof trusses installed and work on the locker room walls is well underway. Concrete footings and foundation for this new 120,000 square foot building are two-thirds done and will be finished by the end of December. Sidewalks and curbing on Crestline are in process and the school's auxiliary parking lot is paved.

The last of the sod for the four new sports fields (football/soccer, varsity baseball, varsity softball and a combination baseball/softball practice) has been laid. The project also provides lots of open grass areas that will be available for use as small practice venues.

Taking advantage of a major construction project in our own backyard, 20 third year Project Lead-the-Way civil engineering students from Mt. Spokane recently toured the work site. The students, accompanied by teacher Bill Patrick, learned about engineering infrastructure considerations in areas such as plumbing, foundation and sewage disposal. In the coming months engineering students from Mead High and Riverpoint Academy will also have opportunities to visit the Northwood construction work site.



Single Points of Entry Brentwood & Evergreen

The construction of single points of entry at Brentwood and Evergreen are complete. Both schools now have a second set of inside main entry doors, visible from the main office, that are locked once school is in session. Now when parents or visitors arrive they are buzzed into the main office to check in. In the next few months Mountainside Middle School will be reconfigured to provide this same sort of entry system.



Funding for single points of entry was approved by voters as part of the February 2015 Facilities Improvement Bond. A second round of single point of entry construction will start in June 2017. It will include Colbert, Five Mile Prairie, Mt. Spokane, M.E.A.D., Farwell, Mead High, Riverpoint Academy and Prairie View. Meadow Ridge was upgraded last year.

The new Northwood includes a single point of entry and renovation plans at Midway and Shiloh Hills will also incorporate this security measure.

VOLUNTEER



Facilities Planning Committee

We are looking for community members to serve on a Facilities Planning Committee, which will recommend a long-range capital facilities plan. The plan will include a list of projects the district should consider undertaking in the next six years, the cost of said projects and potential sources of funding. The group will meet weekly starting January 10 through the end of April. If you would like to be considered please email jolene.andres@mead354.org.

MEAD MATTERS
 Mead School District #354
 2323 E. Farwell Rd.
 Mead, WA 99021

Non-Profit
 Organization
 U.S. Postage
 PAID
 Spokane, WA
 Permit No. 622



Questions or concerns?
 509-465-6014
www.mead354.org

The Mead School District does not discriminate in any programs or activities on the basis of sex, race, creed, religion, color, national origin, age, veteran or military status, sexual orientation, gender expression or identity, disability, or the use of a trained dog guide or service animal and provides equal access to the Boy Scouts and other designated youth groups. Grievances or concerns should be directed to: Jared Hoadley, Executive Director of Student Services and Activities - 509-465-6008 or jared.hoadley@mead354.org.

ECRWSS EDDM
 Postal Customer

A complete listing of holiday choir, band and orchestra concerts is posted on the Mead School District homepage (www.mead354.org).

Enrollment Milestone
 A Message from
 Superintendent Tom Rockefeller



The Mead School District hit a milestone this month . . . for the very first time our enrollment is over 10,000 students (10,002 to be exact). As the graph below illustrates, since 2006 our enrollment has increased by 897 students! This includes an increase of 190 students in the past year alone. Ideally each elementary school would house 550 students with 750 at each middle school. Our average elementary school enrollment is 581 and our average middle school enrollment is 771. Coupled with this growth are the all-day kindergarten and K-3rd grade class size reduction state initiatives. These two priorities alone will require more than 50 new classrooms in our elementary schools.

To address growth in a proactive manner the Board of Directors has authorized the formation of a Facilities Planning Committee. This committee will convene in early January and in June recommend projects for board consideration. Thanks to funds provided in our last bond the district owns property on Five Mile Prairie that has space for two new schools. This, plus the ability to use the old Northwood to house students for ten years, means we are in an excellent position to deal with current growth and present the community with good options to address future growth.

Regarding our emphasis this year on learning programs, I want to thank all who shared their thoughts, priorities and suggestions in the recent ThoughtExchange online engagement. Results have been posted on district and school websites. The feedback provided will help us refine existing programs and consider new offerings in response to the voice of our community.

In closing, I invite you to attend one or more of the holiday music performances taking place during December. Each year my wife and I attend many of these fun and entertaining events. The caliber of performances is simply outstanding!

Mead School District
 2016
AP Scholars

The Mead School District is proud of the 118 Mead High and Mt. Spokane students who scored well enough on last spring's Advanced Placement exams to earn special designations from The College Board. A complete list of these AP Scholars is posted on the Mead School District homepage (www.mead354.org).

MEAD
SCHOOL DISTRICT

**Student Enrollment
2006-2016**

Increase in Enrollment = 897
 Average per Year = 81 Students

Steady Growth

Year	Enrollment
2006	~9100
2007	~9200
2008	~9350
2009	~9300
2010	~9550
2011	~9500
2012	~9550
2013	~9600
2014	~9750
2015	~9850
2016	10,002