

## LOCAL NEWS

# Oscoda students get firsthand drone lesson from ACC staff

by Jenny Haglund

OSCODA – The world of flying unmanned aerial systems (UAS), or drones, is constantly evolving and Oscoda High School (OHS) students learned the latest about the increasingly popular activity.

Students met at their school on April 19 with Alpena Community College (ACC) UAS instructor Brian Dawson, media technician Gary Hollingsworth and instructor Randy Patterson.

OHS teacher Mike Berenkowski said three separate sessions were held that day, each comprised of one hour of classroom style learning and one hour of actually flying the drones.

Participating were sophomores to seniors who are physics students, as well as his STEM (science, technology, engineering and math) students.

This is the second time ACC has offered such a seminar at OHS, and the presentation has also been made at other local districts in recent years.

The interested learners first gathered in the board room of the school, where Dawson explained just how far UAS have come.

He said the devices have military roots, with one of the world's first drones being the Kettering Bug, an unmanned aerial torpedo flown during World War I.

The top secret Kettering project was considered to be rather high tech at that time, but there have been many drone advancements in the years since.

"The technology was just beginning," Dawson commented.

Following greater improvements to military UAS during World War II and the Cold War, hobbyists started getting in on the

practice in the late 1950s, and the price of the radio-controlled units for personal use continued to drop with mass production in the 1970s.

Fast forward to the present day, and the use of drones has expanded tremendously, along with technological improvements.

UAS can help people monitor and assist with natural disasters by providing assessments of storms, floods and other occurrences, as well as to search for missing people, Dawson pointed out.

Inspections of power lines, cell phone towers, dams, wind turbine blades and more can also be carried out with drones.

"It's a lot easier to put a drone up then it is to try and get a vehicle with a cherry picker back in just to do inspections on insulators and lines in certain areas," said Dawson, of power line inspections.

For home imaging purposes, even those in the real estate business have gotten use out of drones, which can also passively survey aquatic preservation areas, Dawson noted.

One of the biggest applications of drones is for agricultural purposes, including crop inspections and spraying.

Dawson said he expects students will see in the delivery of items via drones in the not too distant future.

Some models have the capability to pick up and move packages and, while the technology is available, Federal Aviation Administration (FAA) regulations have made this a challenge.

"The FAA doesn't want drones to get anywhere near big airports and busy airports," Dawson said.

"There's different rules for different operators. Drones are be-

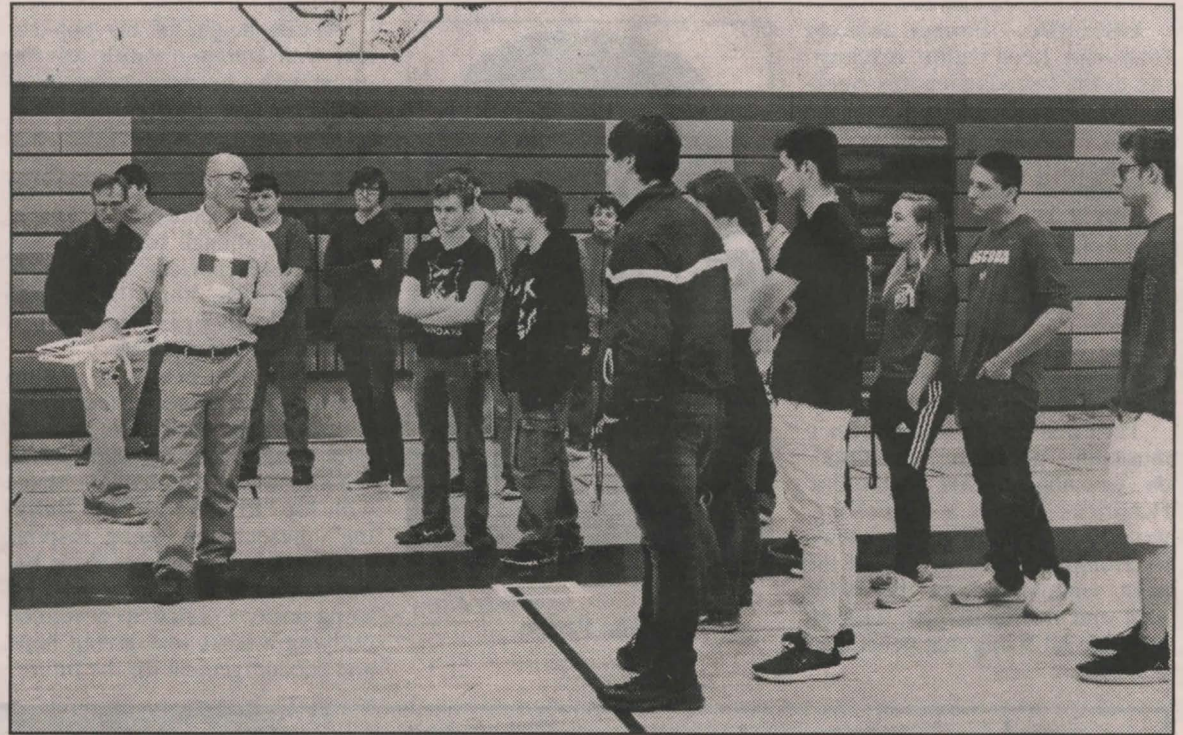


Photo by Jenny Haglund

**HIGH TECH** – Alpena Community College (ACC) instructor Randy Patterson, far left, was one of three ACC staff members who provided a drone seminar to Oscoda High School students on April 19.

with improvements to the GPS systems, computing power, data link bandwidth and size of drones, which now feature smaller batteries with a longer life, in addition to changes in airframe materials, which now include a lot of composites.

Dawson said the cameras included with many drones are of high resolution and superb quality. They can take photos, record and live stream video and some have forward looking infrared cameras, which can be used for heat inspections.

Then it was time for the stu-

job.

While they used smaller models, weighing less than one pound, Patterson demonstrated ACC's DJI Phantom drone which, along with the tablet used to control it, cost about \$1,500.

Dawson said hobby drones can be priced as little as \$20, but there is also no limit on how expensive they can be.

"This is a lot of fun for us," said Dawson, of the times he and his co-workers are able to share their knowledge with students of various school districts.

ACC offers a degree in marine





Photo by Jenny Haglund  
**AERIAL ADVANCEMENTS –** Modern drones, such as this DJI Phantom model which is capable of live streaming video, have come a long way in recent years.

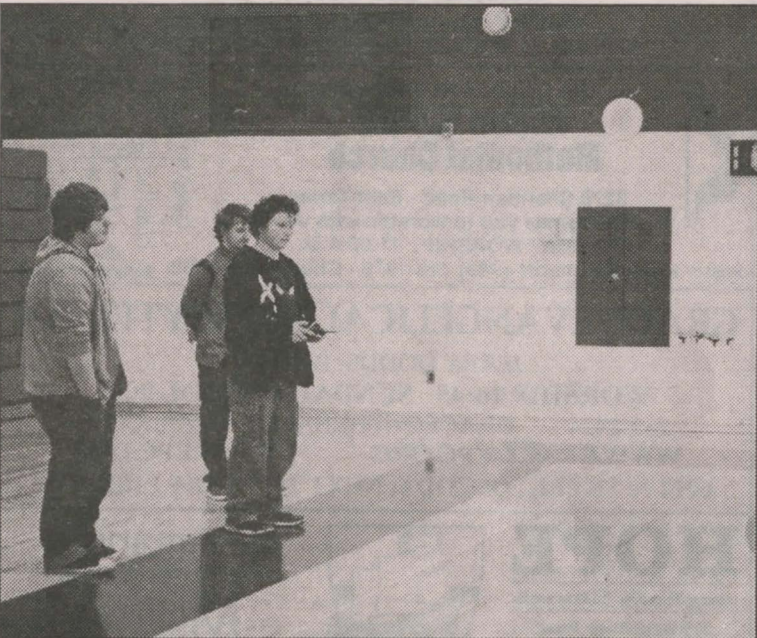


Photo by Jenny Haglund  
**IN FLIGHT –** Classmates look on as this student flies a remote controlled drone in the Oscoda High School gymnasium.

coming professional tools.” He said one must pass a FAA test to get a drone pilot license to operate the machine for business, professional or commercial purposes. He told the students that this is something they may want to look into in the future, as it’s opening up some job opportunities and evolving rapidly. Hobby operators are also asked to adhere to some standard guidelines and practices when using a drone, but Dawson said it ultimately comes-down to the pilot to exercise good judgment.

“If you have a drone, be considerate of others,” Dawson stressed, telling the students that people do have privacy and safety concerns when it comes to UAS. He said most people aren’t really bothered by drones, unless the use becomes frequent or aggravating to someone.

Dawson said drones have come along way in the last couple years,

to put their knowledge to the test and practice their newfound skills. The students paired up and made their way to the gym, where Dawson provided a quick demonstration before handing over the controls. He encouraged them, some of whom had never flown a UAS before, to keep the unit low and close, and to only try small maneuvers to start. Aside from a few minor crash landings – and one drone which found itself resting atop a basketball hoop – the students did a fine

technology, which includes the use of underwater robotics drones. It is a goal at the college to establish a degree program specific to UAS, and curriculum development for such has been underway. Several programs at ACC implement the use of drones, including the utility technology classes, and a custom-made mobile command and control unit has been obtained for training purposes. For more information about such classes, visit [www.alpenacc.edu](http://www.alpenacc.edu).



Photo by Jenny Haglund  
**PILOT PREP –** Brian Dawson, unmanned aerial systems instructor at Alpena Community College, demonstrates to students how to properly fly a small hobby drone.



The family of  
**Jacqueline “Jackie” David**  
wishes to express eternal gratitude to the many people who supported this good, kind and loving woman through her battle with a brain tumor, especially in her final days.

First and foremost is Pastor Timothy Azzam and the congregation of  
**Trinity Lutheran Church.**  
You were her family. Your many visits, cards, music and flowers gave her joy and peace.

Then there are her devoted friends, to whom Jackie was equally devoted. She felt so fortunate to have the love of so many. She especially took comfort from  
**Beverly Cornell, Shirley and Phil MacLeod, Al and Jan Alexander, Edna Rainey and her church row.**

We won’t ever forget owner Jan Ranger, administrator Jay Wells and the staff of  
**The Harbors Assisted Living of East Tawas.**  
They protected Jackie like pit bulls, truly cared about her and allowed her to live out the final months of her life with dignity, clarity and surrounded by love, whether it was Tina polishing her fingernails, hugs from Bridgette or the prayers and song shared by the Harbors pastor. You will never know how much it meant to her and to us.

We are also thankful for the support and efforts of  
**Buresh Funeral Homes**  
They went the extra mile.  
We take comfort in the love and knowledge that she no longer suffers and is in the arms of her Lord, her beloved husband, parents and brothers.

