

We are team 11110T from Greenspun Junior High School in Henderson. Our team is made up of three eighth-graders; Andrew Gibson, AJ McAfee, and Fiona Morgan, and a seventh-grader; Alexandria Sundstrom. The topic for our Careers Project is Pilots.

Pilots are a valuable source in society because if put to good use, we can use them to spy, transport people and things, or even end wars. The skills required to

become a pilot are an understanding of maths and physics, excellent spatial awareness and coordination, the ability to think quickly and make decisions in difficult situations, and much much more.

Airline pilots have just as much responsibility as fighter pilots as they are transporting many people and valuable items people cherish. They may not be out fighting, but they have to make

sure everyone and everything on the plane is safe and comfortable. On flights, pilots have the authority to give orders, arrest people, and write fines if needed. Pilots can also prohibit someone from going on the flight (troublemakers, etc).

The Thunderbirds are part of the US AirForce, their job is to entertain people and perform shows to demonstrate the capabilities of the air force. They fly in the air, faster than twice the speed of sound at times, if they fly at this speed they will create a sonic boom and destroy any glass within the radius of their planes. They purposely try to avoid this because of the



While the person in the left seat is the captain, the co-pilot is just as important. While one flies to their destination, the other flies back to where they started the flight.



One of Michelle's favorite tricks is flying upside down over another, it's called The Calypso, or The Reflection

destruction they can cause. The Thunderbirds also do highly skilled tricks that take years of practice to amaze crowds.

The person we chose as our icon is Major Michelle Curran of the Thunderbirds. She is the solo, left-wing pilot for the Thunderbirds, she is also the



Major Michelle Curran

only female equipped on the team. Curran says that being a Thunderbird “Five position, the lead solo position, in that position on the team we fly upside down the most of anyone, so if you have ever been to one of our shows and seen the calypso or the reflection which is the two jets that look like they're touching. I'm the one that's upside down and the same for the reflection, I spend a lot of time during the show hanging upside down from the lap belt.”

After studying an interview performed by CBS evening news, we found out that Curran says being a Thunderbird to her means “The opportunity to inspire people, that's why I applied for the team. I was already flying the f16 But like I said, flying is fun but is not the primary reason I joined.” Later on in the interview when talking about her trip with the Thunderbirds to Malaysia, Curran states that they met little kids on the line that were just in awe. In awe, because a female performed just as good as the males on the team.

The average salary for an airline pilot is \$130,059. Although Thunderbird pilots make an average of \$90,000. In the US Army, each rank has its own pay. The Air Force gets the same pay as those in the Navy, Marines, etc. In order of lowest rank to highest, the pay rate is per year. Second lieutenant,



One of Michelle's favorite tricks is flying upside down over another, it's called The Calypso, or The Reflection

37k-47k; First lieutenant, 49k-59k; Captain, 56k-81k; Major, 65k-94k; Lieutenant Colonel, 74k-111k; Colonel 86k-139k; Brigadier General, 109k-155k; Major General, 129k-180k; Lieutenant General, 176k-190k; and General, 190k.

Robotics has prepared us to study pilots by allowing us to think outside the box and improvise. During Robotics if you keep the same design for all of your matches chances are, you will find key aspects of your robot that need improvement. to create a robot without flaws takes skill and an understanding of your opponents and the match. When pilots are flying, sometimes improvement and improv is also needed. In robotics, many steps are needed to build a great program and robot, whereas pilots have to go through many steps to be allowed to fly, including pilot incense, many hours of flight, and much more.

“How do you believe this career field will evolve over the next ten years?” We believe that the tech pilots’ use will change dramatically. For example, one of the only functions in a flight that airline pilots have control over is landing and take off. The rest is automated. In the near future, it is possible that technology will completely replace pilots. We also think that pilots will either have autonomous planes or will completely scratch the idea of pilots in general and allow robots and highly engineered robotics to do all the work.

Pilots relate to STEM in a few ways, pilots need an understanding of math in order to take off and land the plane at a proper angle so they don't hurt themselves, crewmates, and passengers. They also need to have strong spatial awareness and coordination. Technology is involved as well, there are 350 different buttons, switches, knobs, levers, etc. The pilots know what each and every one does. Although the pilots themselves did not build the plane, they use engineering to

make planes. Almost every decision is made by the captain and co-pilot, sometimes in only a few seconds.

If you were to consider a career as a pilot, one of the best schools would be the Purdue University of Aviation and Technology. Purdue University is located in Lafayette, Indiana and tuition costs \$9,992. The acceptance rate is 72%, and the Graduation rate is 75%. Purdue is a public research university, and has a



Famous Neil Armstrong went to Purdue for eight years

“professional flight program” created by the Aviation Accreditation Board International (AABI). The professional flight program now offers state of the art flying simulations that “prepare students with hours of flight practice to hone their analytical skills and critical thinking skill while in the cockpit.” While Purdue

University is an amazing pilot school, if you are looking for military pilot training you will have to

look a little further, for Purdue only trains for a career as a commercial pilot, a corporate pilot, or a charter pilot.

When pilots are flying, they need to have great communication skills. They use a lot of slang when flying to ensure this. For example, AM means Air Maneuvering There are hundreds of different words. Most of them are serious but some are silly like, Air boss which is just the word for the Head of the air department. The Air Boss for the Thunderbirds is Michelle Curran. If you look into the sky at night and you see the lights of an airplane, you can now refer to those lights as the Anti-Smash. That is what the pilots call the strobe lights that go on the planes to make sure they don't hit each other.

There are many steps that are vital in becoming an airline pilot such as “a bachelor's degree in aircraft operations, aviation, aeronautical engineering, or a related field. In addition, you will complete up to two months of ground training and need more than 1,500 hours of flight experience.” To become a Thunderbird you need to have served in the “Air Force for at least three years before you can be considered for the team. If you are hired, you will typically serve between three and four years as a Thunderbird.”

There are lots of different pilots, from the kind that will fly you to your mother's house for Christmas, to the kind that will protect the country. Lots of training is put into pilots, knowledge, skill, and courage. Although pilots may not seem very important or smart, they require certain abilities. A famous pilot, Michelle Curran, has devoted much of her life into training to become what she is today, a great pilot.

## Works Cited

*YouTube*, YouTube, Youtube.com/.

“AVIATION SLANG-PILOT SLANG.” *Sierra Hotel Aeronautics*,  
sierrahotel.net/pages/aviation-slang-pilot-slang.

“AVIATION SLANG-PILOT SLANG.” *Sierra Hotel Aeronautics*,  
sierrahotel.net/pages/aviation-slang-pilot-slang.

“Average Salary for Thunderbird Employees.” *PayScale*,  
www.payscale.com/research/US/Employer=Thunderbird/Salary.

Luther, Carol. “How Much Do Fighter Pilots Make?” *Work*, 24 Sept. 2018,  
work.chron.com/much-fighter-pilots-make-2685.html.

“U.S.A.F. Thunderbirds: America's Ambassadors in Blue.” *Michelle Curran* |  
*U.S.A.F. Thunderbirds*,  
afthunderbirds.com/site/team\_members/michelle-currant/.