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A Naval Aviation Adventure For Two Teens from Connecticut

by Susan Patnaik – October 2016

Aircraft carriers and military flight missions don't usually come to mind when you think of kids and summer camp. But for two teens, that's just what their summer camp 2016 was all about — and more.

In August, Wilton, Connecticut, siblings — Natalie and Harris Patnaik — participated in a six day, fully-immersive STEM Academy at the National Flight Academy (NFA). The Patnaiks have personal ties to both Pensacola and the Navy. Pensacola is their mother's hometown and a frequent vacation destination; and their grandfather served there as a Naval flight surgeon. Their uncle currently serves in the Navy as a captain.

"We've spent many summers in Pensacola and have seen the *Blue Angels* practice up close," Natalie said. "When you see a cluster of jets fly right in front of your face it's pretty exciting."

The goal of the NFA is to inspire youth to take a greater interest in STEM by recreating as closely as possible the life of a Naval Aviator living and working at sea. Students at the NFA are called Ambition eXperimental Pilots, or AXPs for short. Over the course of the week, the AXPs prepare for and complete virtual humanitarian missions that become more difficult as the days pass.

The program is held aboard the world's largest virtual aircraft carrier, *Ambition* (CVT-11). On the outside, *Ambition* is a landlocked building — four stories high and 102,000 square feet in size. Inside, from the exposed mechanics to the florescent lighting to the uniquely bolted steel doors, *Ambition* features all the physical attributes of a *Nimitz*-class vessel. And through every porthole, one sees nothing but the deep blue sea expanding to the horizon in all directions.

Ambition not only looks like an aircraft carrier, it sounds like one too. Natalie and Harris and their fellow AXPs lived with the constant rumbling of engines and the daily roar of fighter aircraft landing or preparing to take off. And they attuned themselves to daily bugle calls, waking up to the sound of "Reveille" and observing flag-raisings to the sound of "Taps." They also learned to mark time according to ships bells, especially when food was involved. Breakfast was at seven bells (0700).

"*Ambition* really looked and felt like a ship," said Harris, 14, a freshman at Wilton High School.

According to the Patnaiks, the real fun began in the Hangar Bay when the AXPs came face to face with the program's 30 fully-networked experimental aircraft simulators powered by Lockheed Martin's Prepar3D software, complete with huge nose cones. "The aircraft were really cool. They could 'soar' at top speed, but they also could 'hover' in place by changing the angle of thrust," Harris explained.

Learning to fly the virtual aircraft was the first challenge the AXPs faced. Once "airborne," the AXPs had to learn to control their aircraft through three axes: lateral for pitch; vertical for turning; and longitudinal for banking. Then came the landing. Bringing the aircraft to a safe stop on a flight deck 500 feet in length required skill, focus and practice. Each AXP learned at an individual pace.

"I cannot say we did not 'crash' a few times," said Harris. "It took me several tries before I managed to successfully 'land' on the carrier."

Natalie, a student at Indiana University Online High School, fared better. "Not that it was graceful, but I did manage to 'land' on the aircraft carrier on the first try," she said. "Basically, you have to remember three things: the carrier is positioned at 180 feet above the water, landings on carriers are always from the north heading south and slowing the speed is critical. Of course, no carrier landing sticks unless you drop the tail hook."

By the second day, the AXPs had moved on to touch-and-goes. "Those were fun," Harris said. "After daily missions were completed, we would hang back and practice touch-and-goes to build up our skills."

The simulated flight experience played out across three large computer screens, which functioned as the windshield of the aircraft. AXPs monitored speed, altitude and direction on the HUD, or Heads Up Display. The visual experience tracked real time. While Natalie found flying at night to be "really scary," there was one time of day she absolutely loved to be airborne. "Flying over the clouds at sunset was so beautiful," she recalled.

Harris had his own favorite memory — flying fast. "The aircraft really roared when we took it to Mach 1," he said. But he also added that monitoring fuel consumption was critical for success. "Accelerating at full throttle with the after burner on was a big mistake, because you could hit bingo fuel before finishing the mission. Some of the AXPs learned that the hard way."

The AXPs aboard *Ambition* were divided into squadrons. Natalie "flew" with the Argonauts, and Harris "flew" with the Rough Riders. Each squadron assigned callsigns to its members, some of which were pretty funny. Harris, callsign Sneezy, said his squadron had some great callsigns. "There was a Cookie Monster, a Banana Boy and a Shenanigans." Natalie said her favorite callsign at camp was BowWow.

The AXPs began each day aboard *Ambition* at 0630 with the bugle call, followed by breakfast on the mess deck. At 0800,

AXPs reported by squadrons to Ready Rooms where they took their seats among the iconic, leather pilot chairs (think Top Gun).

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Naval Aviation Adventure Contd.

The first order of business each day was a review of the upcoming mission with their Operations Officer. Would they be putting out a chemical fire on the water, patrolling for illegal activity or performing an air show? Any of those were possible and more.

Once the team understood its mission, it was time to act. Pilots headed to the Hangar Bay to man their aircraft, while radar operators fired up computers in the Joint Operations Center (JOC). According to Harris, this is when communication became vital to the success of the mission. Communication checks, clearing the pilots for takeoff and landing, providing compass headings, clarifying mission objectives: these were the responsibility of the radar operators.

Upon completion of a flight mission, the pilots and the radar operators switched places. In effect, all AXPs experienced each mission twice, once as a pilot and once as a radar operator. "So if you paid attention as a radar operator in the JOC, then you could learn from any mistakes the pilots made with navigation, speed and elevation limits. Then the second time the mission was flown, it was easier to be successful," Natalie said.

When they were not flying missions or providing support in the JOC, the AXPs gathered in the Joint Information Center (JIC) with their Information Officer to conduct research in preparation for upcoming missions. The JIC on *Ambition* is outfitted with computers and smart boards for gathering vital data and performing necessary calculations. Those calculations, according to Harris, always began with scaling the ruler to nautical miles.

On 12 August 2016, Natalie and Harris gathered with their fellow AXPs for a graduation ceremony in the *Blue Angels* Atrium of the National Naval Aviation Museum. Former *Blue Angel* spilot retired Marine Corps Captain, Andy Hall, addressed the AXPs with words of encouragement and motivation. Acknowledging that it takes a lot of hard work to become a pilot, Hall encouraged the young students to remember that success comes down to "dedication and drive and the mentors in our lives."

The National Flight Academy's mission is to inspire student interest in science, technology, engineering and math (STEM). The instruction and challenges provided by the NFA, teach basic principles of aerodynamics, propulsion, navigation, communications, flight physiology and meteorology. They also are designed to develop teamwork and leadership skills.

In total, the NFA ran 11 deployments (six-day sessions) on *Ambition* during the summer of 2016, welcoming students from across the country ranging in academic grades from 7 to 12. The NFA is particularly proud of its female attendance. "Our level of female participation is approximately 33% — roughly twice the national average for women involved in STEM careers," said NFA's Director of Education, John O'Hara.

Supporter Spotlight

It is an honor to spotlight our supporters and share their passion for the National Naval Aviation Museum. The Naval Aviation Museum Foundation gratefully acknowledges the contributions, both monetary and personal, that all of our supporters make. Humble and oftentimes quiet about the enormous impact they make, our contributors have shaped the National Naval Aviation Museum into the world class treasure it is.

This issue's spotlight is on: Foundation Wings of Gold member, ***Dr. Dale Pellot.***

Dr. Dale Pellot, a former Naval Aviator, flew the aircraft, the AD/A1 *Skyraider* during the Vietnam War, as a member of VA-25, know as "Fist of the Fleet." Launched from the USS *Coral Sea* (CVA-43), he flew a close air support mission during the battle of Lang Vei, located in the northwest corner of Quant Tri Provence, South Vietnam, in aid of a U.S. Army Special Forces unit that was being overrun by North Vietnamese troops. Descending through a 300 foot ceiling to bring rockets and guns to bear on the attacking forces, Lieutenant (Junior Grade) Pellot, along with other pilots of VA-25, were instrumental in saving members of the Special Forces Army unit.

Upon returning to the United States, Dr. Pellot attended dental school and had a very successful practice until his retirement. Dr. Pellot and his wife Cynthia, have chosen the Naval Aviation Museum Foundation as the beneficiary of their estate, joining many other Naval Aviators who have chosen to honor the Foundation in their estate plans.

When asked why he chose the Foundation as the beneficiary of his and his wife's estate, Dr. Pellot responded *"...that the Museum is important in preserving and conveying the history and heritage of Naval Aviation for the American public."*

Dr. Pellot in front of the Museum's Skyraider (BuNo 135300) on display in the Museum, which incidentally, he flew during his military service. Donald Watson