

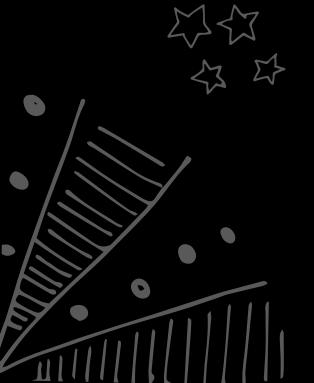
# BEING

# FUTUREPROOF

MEANS BEING READY

FOR THE CAREERS

OF TOMORROW.



Dear future, desting.

My own will prepare me will prepare me for anything way.

You throw my way.

VOL. 18 | NO. 2 | FALL 2017

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2 Recent Grads Thriving in Their Careers

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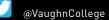
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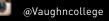
#### **SOCIAL MEDIA**

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Managing Editor Maureen Kiggins

Editor John Bifone

Contributing Writers/ Photographers

John Bifone Neil Gouveia Wendy Hauser Maureen Kiggin Shelley Mazor

Design





#### VINCENT E. COLLUCCI '16, Mechanical Engineering Technology-Aeronautical

#### Current Position: Engineer, Cylent (23 years old)

Vincent Collucci '16 believes that his extensive background in aeronautical and engineering design from Vaughn is helping set his career path at Cyient.

Collucci works with all sorts of jet engines and tooling for jet engines. "I am essentially playing life-size Tetris with some of my designs to ensure each design satisfies its needed objective while accounting for all the tools and hardware." While at Vaughn, Collucci made great use of the extensive networking resources. In fact, it was his connections with fellow students and alumni that helped him get the position at Cyient. He believes those connections and Vaughn's close-knit community formed a strong foundation for his success.

"It makes me smile remembering that students develop a close bond with each other. Many of my fellow students came back to me after I tutored them and it was a great feeling hearing that they were doing well in subjects they once struggled with. They are now able to help fellow students just like I once helped them."

Collucci wanted to be an engineer from a young age. He sums it up by saying, "Vaughn was a milestone on my predetermined path and it helped drive me forward into the future."

#### EMILY SHYU '14, Airport Management

Current Position: Supervisor, Airport Transportation Services, The Port Authority of New York and New Jersey (PANYNJ) (26 years old)

Emily Shyu '14 credits Vaughn with being instrumental in helping expand her network through internship opportunities and many onsite networking events to help connect students with future job prospects. Shyu met key players and managers at the annual internship fair leading to an internship with PANYNJ and ultimately, to a job within the company.

Shyu advises students to take advantage of the career opportunities offered at the College and can attest that "each step I took with Vaughn by my side helped me achieve my professional goals and fulfill my dreams. Shyu plans to continue growing her aviation career through experience in different departments to have a better grasp of overall airport operation.

"The most exciting part of my role in my current position is knowing that our team is making impactful operational decisions that can help our passengers and our airlines," said Shyu. "Seeing our projects come to fruition is very rewarding."

#### BRIAN LINHARES '12, Mechatronic Engineering

#### Current Position: Product Development Engineer, Embraer, Brazil (28 years old)



Brian Linhares '12 is clear and confident in the role Vaughn played in his career. "Vaughn gave me the experience I needed with CATIA" engineering and design software, giving me an edge in the aerospace industry." That experience combined with a helping hand from Elaine Asch, a former trustee of the College, provided the opportunity to meet the president of Embraer for a productive conversation. That conversation led to a letter of recommendation and his position with the company in Brazil. "One of the most exciting things about my position is knowing that something I design will come to life and fly."

Vaughn is committed to helping students prepare for future success, and according to Linhares, "Networking opportunities at Vaughn are career changers or, in the case of students, career makers. The College is small, giving numerous opportunities for students to stand out and meet leaders in the field. Having access to those industry leaders gave me a global vision of what I really wanted to do, expanding my goals beyond what I had initially imagined."



### JENNIFER LEE '14, Airframe and Powerplant

#### Current Position: Aviation Maintenance Technician, Endeavor Airlines (26 years old)

After attending a Vaughn open house, Jennifer Lee '14 registered for the airframe and powerplant (A&P) program within the Aviation Training Institute since she always had an interest in mechanics and hands-on learning. "After my first semester, I fell in love with my classes, and my instructors were able to relay their real-world experience of working at the airlines directly to their students." Lee received her associate in occupational studies and A&P license in 2014. Lee accepted a job as an aviation maintenance technician with Endeavor Airlines.

With Vaughn's flexible schedule, Lee is working full time and continues attending classes to finish her bachelor's degree in aviation maintenance management at Vaughn to make her career options even stronger.

### GAGANDEEP MUNDER '14, Aircraft Operations

## Current Position: Pilot, Endeavor Air (25 years old)

For Gagandeep Munder '14, Vaughn College was like a second family that supported his dream of becoming a professional pilot. The mentors, culture, role models and networking opportunities motivated him to work hard and become "professional and humble in every way."

According to Munder, "It is incredibly exciting to wake up every morning with a high level of energy to do what I love—travel and meet new people so that I can become a better human being overall. I feel the weight and responsibility of getting people to their destinations safely, and it makes me want to improve every day."

One of Munder's favorite things about Vaughn was walking onto the campus and immediately feeling welcomed. "Everybody knew each other on a first-name basis which, created a very family-like environment. My experience at Vaughn made my goals a reality and helped me set new standards for myself. I don't want to stop here even though being a pilot is my dream job. I want to progress and become a lot more versatile."



#### JESSENIA DIAZ '10, General Management Current Position: Air Traffic Controller, John F. Kennedy International Airport (28 years old)

Pursuing her passion has paid off for Vaughn College graduate Jessenia Diaz '10, who landed her dream job as an air traffic controller at John F. Kennedy International Airport (JFK) in New York.

During high school, Diaz decided she wanted to become an air traffic controller. "I researched schools in my area and discovered Vaughn. The rest is history." Diaz earned a certificate in Vaughn's flight dispatch program and took courses in the Air Traffic-Collegiate Training Initiative program and graduated summa cum laude with a Bachelor of Science in Airport Management and General Management. She won the Board of Trustees Award at spring convocation and was selected as the student commencement speaker for 2011.

After being hired by the FAA, she attended a training program in Oklahoma before landing at JFK for further training before becoming a fully-certified air traffic controller.

"My professors at Vaughn helped me tremendously," Diaz stated. "Some of my teachers were actual air traffic controllers from local airports. The kind of hands-on experience that they passed down to us was priceless. My time at Vaughn gave me the knowledge and experience to get me where I am today."

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#### KEVIN ALARCON '14, Mechatronic Engineering

#### Current Position: Manufacturing Process Technician, Itron (25 years old)

Hands-on experience and great classes at Vaughn helped lay the groundwork for Kevin Alarcon's '14 career path at a world-leading technologies and services company. "I graduated from the mechatronic engineering program, and my coursework definitely prepared me well. Taking courses from multiple areas is seen as a plus in the marketplace compared to straight mechanical or electrical degree programs."

Currently, Alarcon is responsible for maintaining lines on the production floor at Itron, making sure everything is running smoothly at all times. He learned how to program programmable logic controllers at Vaughn by working on Siemens SIMATIC Step 7 engineering software. "The knowledge I gained at Vaughn helps me effectively troubleshoot and allows me to constantly learn while maintaining my problem-solving skills. Vaughn made it possible for me to turn my goals into reality by giving me the fundamentals that got me to where I am now."



#### LACY DICKINSON '17, Airport Management

#### Current Position: Operations Officer, LaGuardia Gateway Partners (23 years old)



"Vaughn College offered me the opportunity to grow into the woman I am and to have the career path I do today," says Lacy Dickinson '17. "It gave me the necessary experience and career trajectory to thrive successfully. I love my job and appreciate the daily challenges of problem solving, and there are always new challenges that force you to think outside the box."

While at Vaughn, Dickinson successfully worked with the career services department to obtain an internship and be selected to attend industry conferences. She was also part of Vaughn's Leadership Academy, where she honed the important business skills of networking, high-level decision making, problem solving and exercising self-motivation. She adds, "It also taught me leadership attributes that employers favor such as being politically poised."

Dickinson is taking advantage of all the academic, business and training opportunities the College offered her. "Vaughn helped me have the confidence to do my very best at all times and to believe that what I do is important and valued."

#### STEPHANY MATOS '16, Mechanical Engineering Technology

#### Current Position: Tooling Engineer, Cyient (23 years old)

Stephany Matos '16 used her experience at Vaughn to prepare her to succeed in a professional environment.

"It's very exciting to be one of the few women engineers in my company, and I'm proud to be paving the way for future women engineers to succeed," says Matos. "However, it is challenging to be a 23-year-old woman leading a discussion in a conference room full of male engineers!"

Matos made great use of her time at Vaughn being co-founder of the College's Society of Hispanic Professional Engineers and attending the national conference twice. "We started our own society chapter and that initiative helped many of us—including me—get jobs, internships and scholarships," she says. One of her favorite memories was going to the national conference with classmates and seeing them network, speak to recruiters and get offers from big companies.

Matos wants to see more women in the science, technology, engineering and mathematics (STEM) fields and continues to encourage the younger generation to understand that "STEM is not just for boys but for girls as well."





Edison Luo '15 succinctly summarizes his experience at Vaughn: "The College provided me with a solid grounding to appreciate some of the strategic drivers behind one of the most global and complicated businesses in the world." Luo is currently applying the knowledge and experience he gained at Vaughn to his work as an analyst in Shanghai City, China. His current position allows him to research and write about the trends behind a range of industries, businesses and governments. He assists clients in understanding what is going on around the globe.

Some of Luo's fondest memories were the friendly campus where students and faculty members were close enough to discuss things both academic and personal. "I also liked that Vaughn is situated right in the heart of New York City, where every day many of the most exciting things in the world take place."

#### WASIF IQBAL '15, Mechanical Engineer Technology— Aeronautical

#### Current Position: Test Engineer, Cyient (27 years old)

Wasif Iqbal '15 is proof that hard work and making the most of every opportunity leads to success. He credits Vaughn with guiding him through the process of getting the position he wanted, from writing a proper résumé to mock interviews to helping him secure an internship at John F. Kennedy International Air Terminal (JFKIAT). When Cyient came to campus to conduct interviews, Iqbal was encouraged to apply. "Without that opportunity, I don't think I would be doing what I do."

Iqbal travels all around the world and supports customer flight tests including Airbus in France, Irkut in Russia, Mitsubishi Regional Jet in Canada and Embraer in Arizona and Houston. He is also planning a negative g-force flight at Pratt and Whitney Canada's flying test bed. He adds, "There is no shortage of excitement and challenges in this field."

One of Iqbal's favorite experiences outside of the traditional classroom setting was working with the robotics team. "With the support of Engineering and Technology Department Chair Dr. Hossein Rahemi and the leadership of fellow student Jefferson Maldonado, we developed to the point that we were ranked number one in the United States and second in the world. That entire experience taught me to think outside the box when it comes to innovation, problem solving and working with a team from different backgrounds."

Iqbal sums it up: "Vaughn showed me that hard work and dedication do pay off."



# RANKINGS SUPPORT VISION OF PROVIDING A TRANSFORMATIONAL EDUCATION: "TOP COLLEGES FOR YOUR MONEY" AND "#1 IN NATION FOR UPWARD MOBILITY"

2017 has been a stellar year for Vaughn College and the beneficiaries are the students. This year, Vaughn was named one of Money Magazine's "Top Colleges for Your Money" and was recognized as having the highest upward mobility rate among 2,137 colleges nationwide in an article published in The New York Times. "We are thrilled to be recognized for our efforts as a community to change students' trajectories," said Vaughn College President Dr. Sharon B. DeVivo. "It is also acknowledgement of Vaughn's single-minded commitment to providing its students with a transformative, real-world education that drives lifelong success."

Money Magazine studied 2,400 colleges and used 27 data points to compile its final list. In its ranking, the magazine applauded Vaughn's facilities and offerings, its unique mix of academic programs and ability to meet the high demand for jobs in the industries the College serves. Vaughn also claimed the highest socioeconomic mobility rate in Money's rankings, validating the College's recent appointment as the top institution in the United States for upward mobility by The New York Times.

"More than a third of [Vaughn's] students come from low income backgrounds, and of those, nearly half advance into the upper middle class," says Money Magazine. The New York Times reported that Vaughn College does a better job at moving students from the bottom 40 percent in income to the top 40 percent in income than any of the more than 2,000 institutions it studied.

"By having outside validation of the quality of our degree programs, students and families can feel confident that Vaughn is an institution that provides an engaging educational experience and long-term professional success," says DeVivo. "This is a testament for our institution and does not happen without so many working for years to achieve this success for our students."

MONEY MAGAZINE

TOP COLLEGES

2017-2018

57%

of Vaughn students move up two or more income quintiles after graduating

48%

of Vaughn graduates end up in the top 20% of highest earners in the United States

# POPULAR MECHANICS

RANKED VAUGHN A TOP
SCIENCE AND TECH COLLEGE
2017-2018

# VAUGHN COLLEGE ANNUAL FUND 2017-2018

Annual giving is a central part of Vaughn's fundraising efforts and provides Vaughn with the responsiveness and flexibility necessary to fund emerging opportunities in scholarships, student programming, faculty research and academic initiatives. Every gift in any amount improves the Vaughn experience for our students.

"I give back to Vaughn College because the education and career opportunities I received while studying there allowed me to start my career at JetBlue Airways Corporation. My gratitude and desire for others to excel in the aviation field inspires me to continue donating."



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LaGuardia Airport and Vaughn College have had a special relationship right from the start when Mayor Fiorello La Guardia convinced his World War I flying buddies Casey S. Jones and George Vaughn to move their aeronautics college from Newark to a Queens site overlooking his newly opened airport.

Today, the historic relationship between the airport and the College is all about the future of aviation as LaGuardia Airport undergoes a massive transformation to meet the demands of 21st-century travel.

The synergy with Vaughn is clear to the team at LaGuardia Gateway Partners (LGP), the consortium that won the bid to completely replace LaGuardia's 1960s-era Central Terminal with a \$4 billion, 1.3-million-square-foot redevelopment project that is the largest public-private partnership in US aviation history.

LGP's Tracy Sanford, director of marketing and communications, spoke about the connection. "Vaughn is our neighbor and it is exciting to have an aviation college right across the street. There's so much expertise and interest and enthusiasm from the whole group at Vaughn, including students and faculty; it makes sense to work together. We are building

an amazing terminal and the students have fresh talent to offer us, coming out of a college where they're seeing the new airport grow right before their eyes."

Fray Holness '20, a student with a dual major in airport and airline management, already knew about LaGuardia Gateway Partners when he attended Vaughn's annual internship fair last year. After a successful interview, he secured a summer internship and found himself immersed in assisting the experienced professionals. "The drive and passion of the team has really amazed me," said Holness. "Everyone is so focused and everything is happening at such an incredible pace, much faster than I ever realized. It is exciting to be part of something new and I've learned a lot."

In addition to supporting the LGP project team on operational readiness and transition, Holness conducted a

research project focused on analyzing check-in processes at the Central Terminal. Over a three-week period, he surveyed 200 travelers to verify whether they used the check-in kiosk, curbside check-in or an airline representative. His findings, some unexpected, were presented to the LGP team and will help determine whether more kiosks or more personnel are needed to improve the customer experience, a priority objective for LGP.

Back at Vaughn, Holness will also present his research to Dr. Maxine Lubner, chair of the management department, as part of his coursework. "What I learned in my airport development class at Vaughn was really useful during my internship because it gave me the theory behind the reality at the airport. This experience has reinforced what I always wanted to do—pursue my dream to plan and design airports."

Lubner describes how valuable this relationship is in terms of education and career development for all partners and stakeholders. "Students are learning and applying their knowledge and skills of aviation and airport management and planning while working at LGP. Not only are the students





# FACTS ABOUT THE CENTRAL TERMINAL REDEVELOPMENT PROJECT

- > June 1, 2016: first day of LGP-led terminal operations
- > \$4 billion project value, of which two-thirds will be financed by private funds
- > 1.3 million square feet of new terminal
- > 15+ million passengers in 2016 (half of LaGuardia Airport's current total passenger traffic)
- > 35 gates (same as existing terminal)
- 8 airlines operate out of the terminal: Air Canada, American Airlines, Frontier Airlines, JetBlue, Southwest Airlines, United Airlines, Spirit and Virgin America
- > 39 months to opening of significant portions of the terminal, when 100 percent of passengers will check in at the new head house
- > Dual pedestrian bridges that span active taxi lanes—a first in the world

"Job opportunities exist for employment in many areas from operations to finance and security. ... LGP needs and welcomes young talent to be part of our future and aviation's future."

Tracy Sanford, director of marketing and communications

benefitting, but Vaughn's faculty are able to adapt their coursework to take into account the shifting and evolving airport needs in real time."

For Lacy Dickinson '17, the opportunity to get a job with this history-making project presented itself even before she completed her Bachelor of Science in Airport Management last June. Dickinson had learned about LGP in 2015 while working as a summer intern for LaGuardia Airport's General Manager Lysa Scully, also a member of Vaughn's board of trustees. Says Dickinson, "The next year, at the spring 2016 career fair at Vaughn, I was interviewed on the spot by LGP. I started working

for LGP as an operations officer in May 2017, and I'm so grateful to have this once-in-a-lifetime opportunity to be part of the project from the ground up."

As an operations officer, Dickinson is responsible for assessing and mitigating any situation that comes up at the airport, from a stuck elevator to a fuel spill that presents environmental concerns. "It's very challenging to be on my toes all the time, but Vaughn prepared me for this job. As a member of the American Association of Airport Executives (AAAE) student chapter, we took tours of the airport, saw fueling facilities and control rooms and I was able to see where I would be and what I would be doing. Plus, being at Vaughn, you're in the heart of aviation and one step from LaGuardia."

According to Sanford, LGP has a 35-year lease to operate the new Terminal B and job opportunities exist for employment in many areas from operations to finance and security. "The Terminal will need to constantly reinvent itself, and we need and welcome young talent to be part of our future and aviation's future."







IF YOU ASK DARWING ESPINAL '19, PRESIDENT OF THE SOCIETY OF HISPANIC PROFESSIONAL **ENGINEERS (SHPE), THE NEWLY CERTIFIED VAUGHN CHAPTER IS A** GREAT PLACE TO NETWORK, BUILD PROFESSIONAL ALLIANCES, AND

#### GIVE AND GET SUPPORT FROM A CLOSE-KNIT COMMUNITY OF FUTURE-FOCUSED ENGINEERING STUDENTS.

Vaughn's chapter of SHPE is part of a national network of more than 300 chapters. SHPE's mission is to change lives by empowering the Hispanic community to realize it fullest potential and to impact the world through science, technology, engineering, and mathematics (STEM) awareness, access, support and development. To Vaughn's more than 30 members, SHPE represents a unique opportunity to build bonds that go far beyond the academic realm.

Espinal, who is working on a Bachelor of Science in Mechanical Engineering Technology with a dual concentration in aeronautical and computer-aided design (CAD), is committed to raising awareness of Vaughn's graduates. The group actively supports the STEM field in many ways including teaming up with junior chapters based in high schools and middle schools to help with classes and raise awareness of the career possibilities. One such example is Noche de Sciencios,

or Science Night, where students and SHPE members gather and present ideas and projects to one another. The Vaughn chapter also works closely with other engineering institutions such as New York University, The City University of New York, Stony Brook University and Lehman College, to prepare its members for the workplace and to champion their value to top companies.

As part of their commitment to one another and the chapter's mission, Vaughn members also participated in an event titled "Moving to Mastery" in October where the team had the chance to execute mock interviews, receive resume critiques and get professional headshots in preparation for the SHPE national conference in November. More than 300 companies attend the national conference—including industries as diverse as finance, aeronautical and automotive to present to and recruit SHPE members. As an example, Nissan holds a design contest open to all members that has a \$10,000 prize and a guaranteed internship. At the conference, the Vaughn SHPE team will also participate in "Extreme Engineering," a four-hour speed interviewing event in a room full of interested companies.

"Our commitment to one another's success is a beautiful, bonding experience, truly like a family," says Espinal. "When one of us succeeds, we all do." It's a fitting motif for Vaughn's chapter, a dynamic group of future engineering leaders.



# **UPWARD BOUND: HELPING HIGH SCHOOL** STUDENTS REACH FOR THE FUTURE

VAUGHN ACHIEVED AN IMPORTANT MILESTONE THIS YEAR—15 YEARS OF HELPING UNDERSERVED HIGH SCHOOL STUDENTS PREPARE FOR COLLEGE THROUGH ITS FEDERALLY-FUNDED UPWARD BOUND PROGRAM.

Due to Vaughn's continuing commitment to preparing students to graduate high school and move on to college, in 2017 the US Department of Education competitively awarded Vaughn another five-year grant for \$1,287,500. The recipients of the grants are institutions of higher education, public and private agencies, and organizations, including community-based organizations, with experience in serving disadvantaged youth and secondary schools.

The College has offered Upward Bound since 2003. Participating students served through the program come from low-income families, must be first-generation college students and must also demonstrate academic need. The program accepts 9th, 10th and 11th grade students from Queens-based high schools including Grover Cleveland and August Martin and the students remain in the program until graduation.

Students apply for the program and are selected by Vaughn based on eligibility, an application that includes an essay portion, and interviews with the prospective students and their parents. Currently, there are more than 50 students enrolled in Upward Bound, and traditionally more than 80 percent of program participants graduate high school and go on to attend and/or graduate from college.

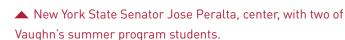
"The impact of Upward Bound on students' lives is profound," says Saralda Ortiz-Howard, executive director of upward bound and STEP. "Our success rate is proof that these students—many of whom face personal and financial challenges—just need the right environment and support to thrive in the academic arena. We are very proud to offer them that opportunity."

Upward Bound courses change every year and include

**MORE THAN 80 PERCENT OF PROGRAM PARTICIPANTS GRADUATE HIGH** SCHOOL AND GO ON TO ATTEND AND/OR **GRADUATE FROM COLLEGE.** 

both an academic semester and a summer component. All the courses and activities are designed to give students the hands-on support and specific tools they need to advance their education including counseling, mentoring, cultural enrichment and work-study opportunities. During the academic year, students receive weekly tutoring and SAT and Regents preparation in addition to attending monthly meetings that include career and educational workshops, cultural activities, and community service events to engage students in personal and professional development.

According to Ortiz-Howard, "One of the key elements of Upward Bound is the close relationship between the students and instructors. For many of our students this may be the first time they are getting the academic and social support they need to envision a successful future that includes college."



The summer component takes place over a six-week period. The first five weeks are an intense and exciting program that incorporates high-school-level math, science and English, along with community service projects and weekly trips. Students can also take elective courses that will give them an insight into various careers in science and technology.

During the sixth week of the summer component, selected students have a chance to attend a two- to five-day college tour trip that allows them to visit several campuses exposing them to various careers and educational opportunities as well as cultural experiences.

Vaughn is committed to the continued success of the Upward Bound program and the community and students it supports.



## STRATEGIC PARTNERSHIPS

# NEW AIRLINE PARTNERSHIPS CREATE PATHWAYS TO EMPLOYMENT DRIVEN BY HIGH DEMAND FOR PILOTS; SEVERAL AIRLINES HAVE PARTNERED WITH VAUGHN TO HELP STUDENTS ADVANCE THEIR AVIATION CAREERS

According to the 2016 Boeing Pilot and Technician Outlook and the Airbus Global Market Demand forecasts, more than 600,000 commercial pilots will be needed in the next 20 years. "We've never had such demand for pilots," said Captain Pete Russo, PhD, aviation department chair and associate professor at Vaughn College. "With many pilots reaching the age of retirement," said Russo, "the major airlines are drawing from the commuter airlines and the commuter airlines are scrambling to find new talent. That's where the partnerships with Vaughn come in."

As of June 2017, partnership agreements had been signed with Cape Air

and ExpressJet, and other contracts are in the process with other regional and major airlines. The partnership agreements differ but all share the same objective—to assist future pilots in acquiring the tools, training and flying hours they need to bring talent from the classroom to the pilot's seat.

These partnerships are evidence of Vaughn College's focus on helping students get their careers off the ground—a commitment that has resulted in the College's exceptionally high placement rate: 97 percent of graduates are employed, 82 percent in their field, or continuing their education within one

year of graduation.

"Students often complete their classwork and have the theoretical knowledge, but getting flight time is extremely expensive," said Philip Meade, executive director of career services. With these programs, the regional airlines help students build up the hours they need and build their own pilot workforce at the same time."

Under the Cape Air agreement, student pilots who have accumulated 800 hours in a single-engine plane can take the co-pilot seat in a Cape Air twin-engine Cessna and accumulate the 1,500 flying hours needed to eventually get upgraded





"THE PROGRAMS MOTIVATE
US TO GET OUR RATINGS
AND BUILD HOURS FASTER,
KNOWING THAT THERE
IS A SPOT AVAILABLE AT
A REGIONAL AIRLINE."

Paulo Adragna

to captain. From there, they accumulate piloting command hours in a passenger airplane for several years. Cape Air has an agreement to transfer eligible pilots to JetBlue as co-pilots on larger aircraft.

"What's innovative about this program," said Russo, "is the collaboration between the major airline JetBlue and Cape Air, where Cape Air 'donates' the right seat so that Vaughn students can accumulate the 1,500 hours they need to move to the larger airline."

ExpressJet's Airline Pilot Pathway Program (AP3) is different in that it starts even earlier in a student's training by marking out a clear path from flight training to certified flight instructor, tracking the instructors' hours to the 1,000-hour level and then putting the student instructors in an ExpressJet training program. While still a student at Vaughn, the instructor can become an ExpressJet employee and receive benefits and pay, a clear demonstration of the airline's desire to attract and retain aviation talent.

"These regional airlines know they will ultimately lose a lot of pilots to the major airlines," said Meade, "but they have relationships with the majors, and they hope that some pilots will make a lifestyle choice to stay regional."

Paulo Adragna '18, who recently became a Republic Airlines cadet, believes that the airline programs are a big selling point for students. "The programs motivate us to get our ratings and build hours faster, knowing that there is a spot available at a regional airline. When I started as a freshman at Vaughn, I wasn't aware of any programs like this, and I think the word is just starting to get out about these opportunities at the career fairs."

From the career development standpoint, there are other benefits of applying to the partnership programs, Meade points out. "When a student goes through the interview process to be selected for the pilot pathway program, that helps them build skills that put them more in charge of their future career even before they get a job."

▼ Philip Meade, executive director of career services, offers assistance to Vaughn students searching for jobs or internships.



# Two Long-Standing Board Members Retire

GEORGE A. VAUGHN, SON OF THE CO-FOUNDER, AND THOMAS MAROTTA, SON OF 1938 CASEY JONES GRADUATE PATRICK MAROTTA, HAVE BOTH SERVED ON THE BOARD OF TRUSTEES FOR MORE THAN TWO DECADES, BRINGING THEIR PASSION FOR THE INDUSTRY, COMMITMENT TO EDUCATION AND DEDICATION TO VAUGHN COLLEGE

Vaughn College owes thanks to two board members who have served as trustees for more than two decades. Their passion and dedication to continuously moving the institution forward while keeping Vaughn at the forefront of the fields it serves has resulted in successful degree programs and ongoing opportunities to ensure success for every Vaughn student.

"This institution and the board of trustees have been so fortunate to have had the benefit of the support, engagement and efforts of George Vaughn and Tom Marotta for so many years," said Chair of the Board of Trustees Thomas McKee. "Their service has been instrumental during a critical period in the College's history as it was transformed from a technical training school to

the broad-based academic institution it is today. We thank them for their service and wish them well in their retirement, knowing they will always be connected to Vaughn College."

FOR GEORGE VAUGHN, there was never a question of a commitment to Vaughn College. Son of the co-founder, he witnessed the birth of the institution as a boy, and his family has been closely tied to the College's history at every stage of its evolution—including the move from Newark to New York City, the change from a proprietary institution to a nonprofit accredited by Middle States in the 1960s, and the change of the institution's name in 2004 from the College of Aeronautics to Vaughn College of Aeronautics and Technology. This change reflected the



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MAROTTA FOR SO MANY YEARS."

#### Thomas McKee, chair of the board of trustees

College's greatly expanded academic curriculum.

Vaughn joined the board of trustees in 1996. It was a time when the airline industry was in crisis and the College completely revised its curriculum and increased its offerings to include the first bachelor of science program. Within a few years, an ambitious strategic plan was developed to reshape the campus and curriculum, upgrading the facilities and introducing graduate-level programs.

Seeking the funding needed to turn the strategic vision into a reality, in the late 1990s Vaughn was the first chair of the development committee of the board and has served on it ever since. "We learned how to raise money, and we worked to build alumni support. We had lost track of a lot of alumni, and we needed to get back in touch with them and ask them to give back. Now we have improved our relationship with our alumni and that's the core of fundraising, along with state and federal grants."

Vaughn was quick to credit President Dr. Sharon B. DeVivo with initiating many grant proposals that have resulted in funding that supports the exceptional diversity of Vaughn College today. "We are proud to have grants for scholarships so people who wouldn't be able to come to college can come here, be the first to graduate from college and move up through life. And you can see our success in the recent upward mobility study in The New York Times. Vaughn was number one in upward mobility among thousands of colleges."

A moment that stands out in Vaughn's memory and represents the transformation of the College was the opening of the residence hall in the late fall of 2007. "That was really important for us and a bold step that turned out to be very successful," said Vaughn. "It enlarged our geographical scope and enabled us to have students from further away, including other countries, while giving more depth to our student body."

Looking ahead, Vaughn hopes to see the College continue to advance and expand student enrollment while still maintaining quality levels and attracting strong faculty. "The board should work with the community and be attentive to the College's needs and keep reaching out to alumni," he said. He is pleased that his family's multigenerational commitment to the College will continue with his nephew Peter Vaughn, who joined the board in 2013 and shares the family's passion for aviation.

"My family has always been committed to the College," said Vaughn. "My most important thoughts about service have always been with the College, and giving to the College has always been joyful to us."

President DeVivo has worked alongside Vaughn for the past 21 years and credits his leadership with making fundraising a key priority of the board of trustees and the institution. "Thanks to George and his desire to build the institution's capabilities around fundraising, last year we raised more than \$3 million to fund scholarships, equipment and faculty positions," said DeVivo. "His legacy is the thousands of students who have gone on to transform their lives and the lives of their families. We are all truly grateful for his commitment."



## THE FAMILY ASSOCIATION WITH VAUGHN COLLEGE IS ALSO STRONG FOR TOM MAROTTA, whose father, Patrick T.

Marotta, graduated as an aeronautical engineer from the Casey Jones School of Aeronautics in 1938 when the school was still in its original Newark location.

"My dad served on the board and he told me he wouldn't retire until he had a replacement," said Marotta, who joined the board of trustees in 1985. "He was a pilot, and I'm a pilot, and my three boys are pilots too. We are an aviation family and live in the aviation world, and that is the perspective I've brought to the board."

Marotta is still an active pilot with commercial, multi-engine and instrument ratings and in nearly half a century of flying, he has logged over 3,600 hours as pilot in command. As chairman and chief executive officer at Marotta Controls, the family business founded by his father, he built on his father's work on rocket engines for the United States Air Force and later the National Aeronautics and Space Administration (NASA) and guided the company's development as a world-class engineering and manufacturing company for precision control systems supporting the aerospace and defense industries. Marotta was inducted into the New Jersey Aviation Hall of Fame in 2017.

This broad background in aviation and aerospace enabled Marotta to make a unique contribution to Vaughn College as it has evolved to keep pace with the expanding aviation industry. Looking back over the decades during which he served on the board, Marotta believes that the expansion of Vaughn, both

in enrollment and in the breadth of the curriculum, has been beneficial for the College.

"Aviation is changing, and Vaughn is doing an outstanding job of meeting the needs of all phases of aeronautics," he said. "Training aviation managers to run fixed-base operations and manage aviation enterprises is a valuable addition at the College and so is the advanced aviation mechanics, because new aircraft require more knowledge of electronics, and these young people have lots of potential along all of these aviation avenues."

Marotta sees further opportunity on the rocket side of the aviation industry, pointing out that there are more than 400 companies doing business in the rocket space. "Today, there are huge opportunities and bright futures for Vaughn graduates, whether they choose airlines, general aviation or aerospace and spaceflight service companies. Few countries in the world have the kind of aviation population we have, with over 100,000 general aviation aircraft in the US and 12,000 corporate aircraft. This is a great time for aviation in this country and Vaughn is a great place to get started."

The contributions of the Marotta family continue with his son Patrick, the current president and chief executive officer of Marotta Controls, who serves on the President's Advisory Council as well the 2016 and 2017 Gala committees. "The strong connection of the Marotta family to Vaughn College has mirrored the growth of aviation and this institution," said DeVivo. "We are so appreciative of Tom's contribution and the indelible mark that his family has had on our success."

#### **PUBLICATIONS**

#### **STUDENTS**

Vaughn's students recently presented papers at multiple conferences with mentor support from the engineering and technology department associate professors Dr. Shouling He and Dr. Amir Elzawawy and the department chair, Dr. Hossein Rahemi.

#### 124th ASEE Annual Conference, Columbus, Ohio

"Volumetric Flow Visualization Using CWLaser and Scanning Mirrors" by Waqas Latif '16, Milana Natanova '16 and Richa Bagalkotkar '17

### 15th Latin American and Caribbean Consortium of Engineering Institutions, LACCEI2017, Boca Raton, Florida

- >"Innovative Drone Design for the AHS Micro Air Vehicle Competition" by Bobby Tang '16 and Utsav Shah '18
- > "Self-Designed Drone as a Platform for Engineering Education" by Andrew Aquino '17, Bobby Tang '16, Utsav Shah '18 and Daniel Khodos '18
- >"Anti-Spill Cup" by Monica Vanterpool '19 and Dimitri Papazoglou '17
- > "The Jungle: An Aeroponic System for Individual Urban Agricultural Needs" by Gonzalo Forero '17, William Mayorga '17 and Dylan Neary '17

# Society for Experimental Mechanics (SEM), Conference and Exposition on Experimental and Applied Mechanics, Indianapolis, Indiana, June 12-15, 2017

> "The Effect of the 3-D Printing Process on the Mechanical Properties of Materials" by Bobby Tang '16, Daniel Khodos '18, Oliver Khairallah '18, Richi Ramlal '20 and Yougashwar Budhoo '05





▲ Monica Vanterpool '19 presents her research at the LACCEI 2017 Conference in Boca Raton, Florida.

#### **FACULTY**

Vaughn faculty research was recently presented at the following conferences.

#### 124th ASEE Annual Conference, Columbus, Ohio

> "Summer Engineering Experience (SEE) Program to Prepare Freshman Students for Engineering Studies" by Dr. Hossein Rahemi, Dr. Margaret Ducharme and Dr. Shouling He

#### 19th International Symposium on Aviation Psychology, Wright State University, Dayton, Ohio, and ESSA/ASHFAS/ERGOAFRICA Conference, Johannesburg, South Africa

"Follow-Up Examination of Simulator-Based Training Effectiveness" by Dr. Maxine Lubner, Deb Henneberry, Dr. Sharon B. DeVivo and Dr. Andrew Dattel (Embry-Riddle Aeronautical University)

#### 2017IACBE Region 9 Conference, Prague, Czech Republic

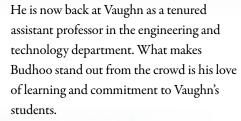
- "Integrating Preparation for Industry Credentialing into Business Education Courses for Emerging Professions" by Dr. Peter Canellis and Dr. Maxine Lubner
- Waqas Latif '16 accepts the innovation award at the124th ASEE Conference in Columbus, Ohio.

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## FACULTY Yougashwar Budhoo '05, PhD

Dr. Yougashwar Budhoo graduated from Vaughn in 2005 with a Bachelor of Science in mechanical engineering technology and later earned a master's degree in mechanical engineering from The City University of New York (CUNY) and a doctorate from the CUNY Graduate Center.

"As a student, I always felt that people here cared for you. ... Now that I am a professor, I want to help inspire Vaughn students to reach for the stars."



As a child growing up in Berbice, Guyana, young Budhoo had an inquisitive, open mind. He was first attracted to medicine and earned a scholarship to medical school in Cuba. However, he decided to come to the United States when his parents emigrated, confident that he would find the right path for his passionate interest in learning. Happily for Vaughn College, those passions included an interest in engineering and aerospace, especially in the materials used to build aircraft.

In fact, it was the defense of his thesis, "Effects of Temperature on the Impact Damage of Composite Materials," at the CUNY Graduate Center in October 2010 that earned him the "doctor" title he aspired to as a child in Guyana. Composites are two or more different materials combined together to create a superior and unique material.

Budhoo is happy to be back at Vaughn. "As a student, I always felt that people here cared for you," he says. "Now that I am a professor, I want to help inspire Vaughn students to reach for the stars." He believes that the College's tight-knit community offers a great learning opportunity. "The low student-to-teacher ratio means that we know all our students by name, and we really understand their needs and strengths. In addition, we are committed to being current on all the latest technologies, which enables us to transfer that knowledge to students." One example of that is Vaughn's annual technology day and industry advisory council meeting. An industry group composed of companies like Sikorsky, Corning and Con Edison, and learning institutions like LaGuardia Community College and New York City College of Technology, come together to evaluate Vaughn's programs, courses and software to ensure that it is offering the very best and most current education possible.

"We are very fortunate to have Dr.
Budhoo teaching in the engineering and technology department," said Dr. Hossein Rahemi, department chair. "He was a student of mine before joining the faculty at Vaughn and was always at the top of his class. He now brings that dedication and passion to the classes he teaches and always strives to enhance the success of our students."

### ALUMNI

### Michael Teets '70

Michael Teets, co-inventor of the first micro-turbine engine, credits his education at the Academy of Aeronautics (AOA), now Vaughn College, with inspiring his lifelong passion for jet engines.

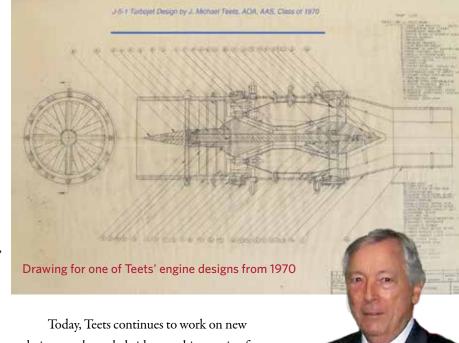
Teets had grown up around machinery at the garage his father owned and operated in New Jersey, but he had never been close to a gas turbine engine until he and his twin brother, Jon, landed at the Academy of Aeronautics (AOA) in 1968 as associate degree students. Ignition was instantaneous for what has proved to be Teets' lifelong passion for jet engines.

"When I got to AOA, I needed to get up to speed on the math, science and physics," said Teets, "and that was challenging. Then I took an introductory course on the theory of turbine engines and I got excited and had to know more."

Soon he was working on designing and building a small-scale, 20 lb. thrust turbo-jet engine he named the J-5-1, a project that occupied all of his spare time but ultimately helped him get the job he dreamed of as an experimental engineer at Pratt and Whitney.

"I knew I wanted to work at Pratt and Whitney," said Teets. "I thought that my jet would not only demonstrate what I learned, but also how I could apply that. I sent engine drawings and photos along with my résumé and I got hired at a time when they weren't even recruiting."

By the late 1980s, Teets had teamed up with Jon to develop the world's first micro-turbine engine. Highly innovative, the lightweight, low-maintenance TA45 engine created a new market niche that carried the turbine industry into the under-20-kilowatt-power-generation-unit market as demand for small on-site generators began growing.

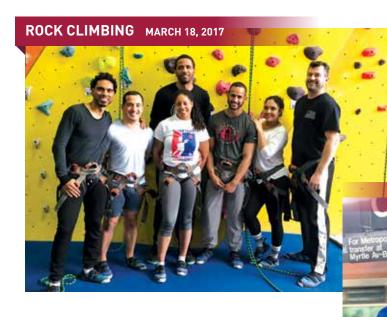


designs, such as a hybrid gas turbine engine for the hybrid vehicle markets including general aviation electric aircraft, United States Army unmanned aerial vehicles and distributed energy markets. Almost 50 years after graduating, he still talks about the benefits of a Vaughn education. "The small, hands-on classes are important," he said. "I got my mechanics license there in addition to the academics, and I believe you have to get your hands dirty and understand manufacturing to be a good designer."

Teets recently offered to donate the first micro-turbine engine he co-designed for display on campus. "I hope this will inspire students as I was inspired by my first exposure to jet turbines. I got hooked and have found that if you can conceive of something and believe in it, you can achieve it."



#### **ALUMNI** EVENTS



 Vaughn alumni took part in indoor rock climbing at The Cliffs in Long Island City. The facility is one of New York City's largest and varied climbing facilities and provided everyone with a new, fun experience.

UNDERGROUND SUBWAY TOUR APRIL 8, 2017

Alumni attendees were able to get a thorough lesson on the history of the world's largest rapid transit system from the Metropolitan Transportation Authority (MTA). They explored historic subway stations and learned about future MTA projects.

FAMILY, FRIENDS AND ALUMNI FESTIVAL APRIL 22, 2017



◀ Vaughn College invited alumni, friends, students and their families for a festive day of entertainment and

The graduation celebration reception at Studio Square NYC continued the annual tradition in which seniors celebrate their academic accomplishments with members from the Vaughn community. For the first time, the event featured live music from Vaughn's very own music club.

GRADUATION CELEBRATION MAY 19, 201

#### **UPCOMING** EVENTS

#### **HOLIDAY RECEPTION**

Thursday, December 7 | 6 p.m. to 9 p.m.

#### Vaughn College | 86-01 23rd Avenue, Flushing, NY 11369

Ring in the holidays with employers who have recruited at Vaughn, along with fellow alumni and friends of the College. Enjoy cocktails, hors d'oeuvres and entertainment as we toast to the new year.

#### **SOUTH FLORIDA RECEPTION**

Friday, March 2, 2018

#### Miami, Florida

The office of alumni affairs invites alumni in the South Florida area to attend a cocktail reception and reconnect with Vaughn College.

For more information contact Neil Gouveia, director of alumni affairs at 718.429.6600, extension 112 or neil.gouveia@vaughn.edu.

#### **▶ NEW FACES, NEW PLACES**

The staff and faculty who are in new positions or joined Vaughn College recently:

#### **STAFF**

#### Ayanna Jones

customer care representative, financial aid

#### Danny Helbig

residence hall facilities coordinator. facilities

#### Janil Garcia

financial aid counselor from assistant counselor, financial aid

#### Maria Patricia Jimenez

assistant director, financial aid from counselor, admissions

#### William Moore

driver/maintenance assistant, facilities

#### Willie Hernandez

assistant director, Upward Bound/STEP from part-time activities coordinator

#### **FACULTY**

#### **Elaine White**

dean of students, student affairs

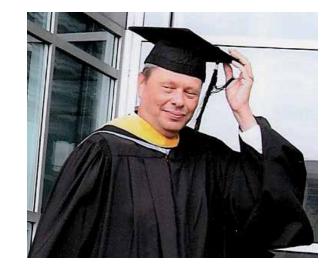
#### Mohammed Benalla

assistant professor, engineering department

#### Samer Elsayed

instructor from adjunct, aviation training institute

#### IN MEMORIAM



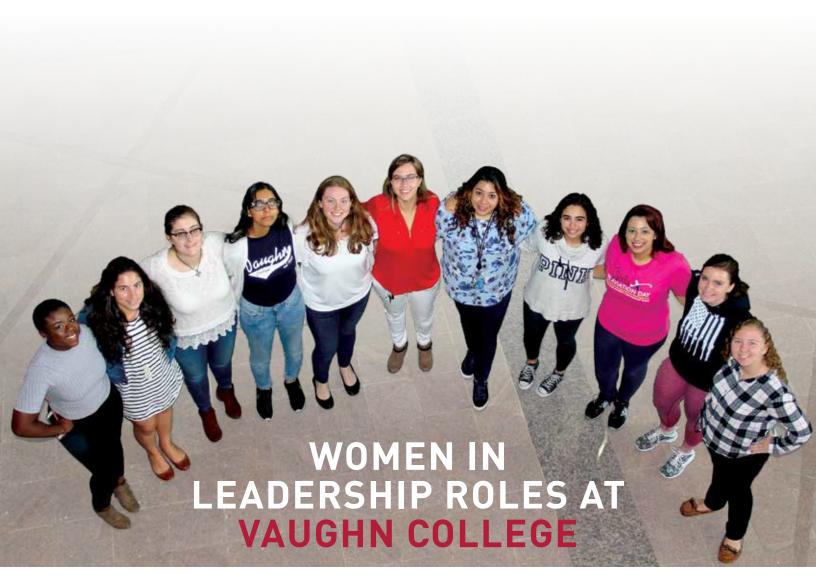
#### ANDREW KNEISSL'90

Vaughn College mourns the passing of Professor Andrew Kneissl'90, a College of Aeronautics alumnus from the class of 1990 and a dedicated professor who specialized in avionics and taught at Vaughn for nearly three decades. He is truly missed by his students, his colleagues and his friends.

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86-01 23rd Avenue Flushing, New York 11369



For the 2017-2018 year, the Vaughn community is fortunate to have more than 15 female students who are active in leadership roles as club presidents, resident assistants and participants in the leadership academy.

The Student Government Association, National Society of Black Engineers, Women in Aviation, Car Club and Circle K all have female presidents, while other women serve as officers in student clubs and organizations. These leaders take an active role in student orientation, lead events on campus and seek to inspire women to consider careers in science, engineering, technology and mathematics.