

# Vaughn

COLLEGE MAGAZINE Spring/Summer 2012



$$\frac{d}{dx} \left( \frac{d^{n-1}f(x)}{dx^{n-1}} \right) = \frac{d^n f(x)}{dx^n}$$

$$\frac{d}{dx} \left( \frac{d^2 f(x)}{dx^2} \right) = \frac{d^3 f(x)}{dx^3} = f'''(x)$$

2 Taking the lead in Science, Technology, Engineering and Math education

6 Enhancing the College's student experience

8 Annual financial report and donor list, 2010-2011





*Vaughn College students apply classroom theory in the College's state-of-the-art simulator laboratory. Inside the cockpit of the CRJ-200 shown here, students can experience almost all of the issues confronted by pilots of a Canadair regional jet.*

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-  [twitter.com/VaughnAlumni](https://twitter.com/VaughnAlumni)
-  [youtube.com/VaughnCollegeTV](https://youtube.com/VaughnCollegeTV)
-  [linkedin.com/in/alumni](https://linkedin.com/in/alumni)

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# TAKING THE LEAD WITH AN INNOVATIVE CURRICULUM



In 2007, Jade Kukula graduated with a bachelor of science degree in mechanical engineering technology and a lifelong love of space. Kukula joined Lockheed Martin shortly after graduation and began work on the Hubble Space Telescope—her dream job. “My father is a civil engineer from Poland, and he set the foundation for my love of engineering with math and science,” she notes. She credits her mom with her thirst for knowledge.

Kukula is but one example of the STEM graduates that Vaughn has successfully set on the path to a successful future. Of all the acronyms tossed about in education, these four letters might not be as recognizable as, say, SAT, GPA or even PhD, but they are quickly entering the public consciousness as they are invoked by President Obama as key to America’s global competitiveness. STEM stands for Science, Technology, Education and Mathematics. Enhancing education in these four disciplines has been a priority at Vaughn for years, where math and science are a foundation for every degree—well before the White House identified these areas as essential to the nation’s continued technological development and made national headlines.

According to the Center on Education and the Workforce 65 percent of STEM jobs will require a bachelor’s degree or better by 2018, and these fields are projected to grow by 17 percent. Vaughn is well-positioned to take advantage of this growing area and help fuel America’s competitive ability.

STEM education enlists modern technology to teach and provide competency in the science and math disciplines. At its core is the belief that science, engineering and mathematics are interdependent and the integration of technology provides a creative and thought-provoking means of applying fundamental STEM knowledge and skills.



*Sixty-five percent of STEM jobs will require a bachelor's degree or better by 2018 and these fields are projected to grow by 17 percent. Vaughn is well-positioned to take advantage of this growing area.*

Vaughn's learning communities are one example of STEM education in action. Students take two courses simultaneously, in a deeper and more integrated manner by connecting two courses with at least three intersection points. For instance, by combining thermal analysis and differential equations, students have the opportunity to understand physical phenomena in concrete mathematical terms. Students in learning communities are better connected to each other and share more meaningful engagement with the course material.

Dr. Paul LaVergne, chair of the arts and sciences department, brought the learning community concept to Vaughn three years ago as the result of a multimillion dollar grant awarded by the US Department of Education. "Our goal was to engage students in course material in a manner that helped them to see the interconnectedness of what they were learning." He adds, "Seeing trends and meaning across the curriculum is key to students' ability to retain and absorb the critical skills for lifelong learning."

Vaughn was founded by aviation and engineering pioneers who saw the need for highly trained technicians and established

an institution to address the evident need. The College continues this tradition by offering programs that address the needs of a new generation.

In 2007, Vaughn became the first institution of higher learning in New York state to introduce a degree in mechatronics engineering. This discipline integrates electrical, mechanical and computer engineering to produce "smart" products from the Mars Rover to the ever-changing smartphone. Recent graduates are using their mechatronics engineering backgrounds at NASA to produce robotic arms and other technologies for the International Space Station.

"Vaughn has leading-edge degree programs and we have the credentialed faculty to assist students in learning the theories and concepts that they need for long-term success," said Dr. Hossein Rahemi, chair of the engineering and technology department. "Our recent investments of nearly \$1 million in our engineering and engineering technology laboratories assist students in the critical application of theory to put learning in action."

Also helping to advance these efforts,

Vaughn was recently awarded a \$4.35-million grant to develop a new approach to engineering education and create a learning environment that responds to the needs of its diverse and economically disadvantaged student population.

"Broadening the Gateway to 21st Century Engineering Degrees" grant reinforces the College's commitment to providing the best educational opportunities for all our students," Senior Vice President Dr. Sharon DeVivo said, "It will provide another avenue for students to cultivate the essential skills needed to be successful in college-level engineering programs and continues the College's commitment to STEM education."

For more than 10 years, Vaughn has been designated as a Hispanic-Serving Institution (HSI) by the US Department of Education. As an HSI, Vaughn competes for federal funding to support institutional transformation. The latest grant provides \$869,000 each year for the next five years. The grant provides funding to enhance STEM education methodologies by integrating math, science and English into new engineering courses and offering

*Vaughn's Wolfgang Segovia '14, left, and Michael Wroblewski '13, tinker with their primary robot during competition at the Vex Robotics College World Championships.*



## VAUGHN STUDENTS COMPETE IN COLLEGE ROBOTICS CHAMPIONSHIP

Five members of Vaughn College's Robotics Club represented the College in Anaheim, California at the 2012 Vex College World Championships in April. Joining club President Michael Wroblewski were Brian Linhares '12, Wolfgang Segovia, Raquel Torres '14 and Jennifer Vasquez '12; the team was led by faculty members Dr. Hossein Rahemi and Khalid Mouaouya.

The Vex competition is the premier robotics event in the world and a key platform for the demonstration of the STEM skills learned at the College. Vaughn's team finished 34th among 47 schools.

The competition challenges students to construct robots capable of participating in a game designed by Vex. Robots could not exceed 18 inches in depth, height or width.

Vaughn began constructing its three robots several months ago. Unlike some schools that duplicated their robots, Vaughn opted for three unique designs. "You want the students to think creatively; to come up with different possibilities," Mouaouya said.

Construction began with pen-and-paper designs. Eventually, parts were put together in what Wroblewski called a "trial-and-error" process.

"The parts are not necessarily tough to put together," Wroblewski said. "But you can't fully understand how the parts work without some trial and error."

curriculum. They all tout the curriculum as the key to future job creation and global competitiveness.

Thanks to significant grant funding over the last several years, Vaughn has been able to invest millions of dollars in top-of-the-line technologies and new methods of teaching to engage students in course material in a deeper and more meaningful way. This includes advanced software such as CATIA (Computer-Aided Three-Dimensional Interactive Application), Solid Edge, Patran-Nastran and innovative teaching methods such as supplemental instruction and learning communities.

"Vaughn has made a commitment to STEM education that will help attract students to our programs as well as address industry demands," Rahemi said. "The new degree programs we have added and the changes we have made to existing programs are the direct result of the feedback from our industry advisory council recommendations. Students are the direct beneficiaries of this input and advice and the outcome is students who have more opportunities for internships, graduate school and, ultimately, employment."

greater academic support to those pursuing the degree. A partnership with LaGuardia Community College, a two-year institution, will help increase engineering bachelor's degree completion among those students transferring to Vaughn.

The 2009 White House "Educate to Innovate" campaign was designed to increase STEM literacy, achieve higher international rankings in STEM disciplines and expand STEM education and career opportunities to underrepresented groups. In his 2011 State of the Union Address, the President called for the hiring of 100,000 STEM education teachers over the next decade and in 2012 he asked Congress to pass legislation that would retrain two million out-of-work Americans with the skills they need to secure high-tech jobs.

"Think about the America within our reach," Obama said. "A country that leads the world in educating its people. An America that attracts a new generation of high-tech manufacturing and high-paying jobs."

As of 2012, more than 500 business, professional and educational organizations have joined with the coalition to raise awareness of the need for a STEM-focused





# Enhancing the Student Experience

Vaughn College has made major strides in enhancing the learning experience of its students over the past several years. Renovated laboratories and classrooms, a sophisticated flight simulator lab and the anticipated construction of a new library are just a few examples of the lengths to which Vaughn has gone to offer its students a truly unique learning environment.

Enrollment has soared by 44 percent since 2008, and the number of students living in the residence hall has doubled since its opening in spring 2008. This sharp rise in enrollment has inspired growth in other areas of the College as well.

“Part of our unique learning experience is the interaction between faculty and students,” said Dr. Sharon DeVivo, senior vice president. “Our faculty members are our greatest asset and the institution’s ability to provide a high-quality education comes from the faculty’s day-in and day-out commitment to bringing

innovative teaching practices and the integration of technology to the classroom,” she added.

According to Dr. Maxine Lubner, interim chair of the aviation and management departments, the rapid rise in enrollment in her departments prompted a need to increase the number of faculty. Vaughn recently added Dr. Peter Canellis to the management department and Dr. George Tracy to the aviation department.

Canellis, a former vice president with GEN Logistics Systems and active consultant with GE Information Services, teaches five classes at Vaughn, including Industry and Labor Relations. Tracy has previously worked for the Federal Aviation Administration (FAA) in the air traffic division and teaches air traffic control. “We remain committed to the continued advancement of the curriculum as student enrollment continues to rise,” Lubner said.

## As enrollment rises, Vaughn adds new faculty and programming for students

Likewise, the engineering and technology department has expanded to include Dr. Amir Elzawawy, whose expertise lies in thermal science and fluid mechanics. Elzawawy, formerly of City College of New York, is teaching mechanical and mechatronics engineering courses.

Vaughn has also welcomed a new group of student affairs staff. Vice President of Student Affairs John Agnelli, himself new to the College, said: “I was attracted to Vaughn because of its commitment to student success both inside and outside the classroom. Our primary focus in student affairs is to support the learning process and seek new ways to collaborate with faculty to increase the engagement of students in their own educational experience.”

To that end, Jerima DeWese was hired as Vaughn’s first dean of student development and campus life and Dr. Gillian Scott-Ward was named its first director of counseling and wellness. Through direct interaction, DeWese helps to provide a culturally rich experience for all students that includes leadership development, health and wellness and personal growth. In her counseling role, Scott-Ward, whose PhD thesis focused on the intellectual development of African-American college students, treats students in individual, group and couples sessions. Her office sponsors campus events on mental health-related issues, including stress reduction, time management and more.

Growing enrollment has also led to the addition of more intercollegiate athletic teams. Jon Hochberg, formerly the head women’s basketball coach at Stevens Institute of Technology, became Vaughn’s first full-time director of athletics, recreation and student services in August 2011. As the men’s basketball coach, he led the Warriors to their third consecutive appearance in the Hudson Valley Men’s Athletic Conference tournament. The Warriors lost to St. Joseph’s College, 84-69, on February 18.

Vaughn currently has six sports—men’s and women’s basketball, men’s soccer, women’s tennis and men’s and women’s cross country—and the College is hoping to add another two to four sports within the next year. To assist with the burgeoning athletics program, Ricky McCollum joined Vaughn as the assistant director to athletics and coach for Vaughn’s women’s basketball team.

In response to the growing numbers of student-athletes, a Student Athlete Advisory Committee (SAAC) comprised of a student leader from each sport was established to represent athletes at Student

Government Association meetings. “As we continue to grow and build athletics, it’s important that student-athletes have a voice on campus,” Hochberg said.

Vincent Papandrea, associate vice president of enrollment and public affairs, believes that once students experience all that Vaughn has to offer they are inclined to enroll. “Once we get prospective students to the campus, they realize the educational experience we have to offer extends outside the classroom as well,” Papandrea said.

## New Faces in New Places

*Faculty and staff who joined Vaughn College recently:*

### FACULTY

**Dr. Peter Canellis**, assistant professor, management department

**Dr. Amir Elzawawy**, assistant professor, engineering and technology

**Dr. Shouling He**, assistant professor, engineering and technology

**Mudassar Minhas**, assistant professor, engineering and technology

**Dr. Young Mee Oh**, assistant professor, arts and sciences department

**Dr. George Tracy**, assistant professor, aviation department

### STAFF

**Annie Bellettiere**, associate director of student activities and residence life

**Byron Gittens**, admissions counselor

**Jerima DeWese**, dean of student development and campus life

**Janel Keeys**, director of residence life and student affairs

**Ricky McCollum**, assistant director of athletics, recreation and student services

**Sheila Miller**, director of food services

**Allison Mosler**, admissions counselor

**Tomasita Ortiz**, English curriculum developer/specialist

**Dr. Gillian Scott-Ward**, director of counseling and wellness

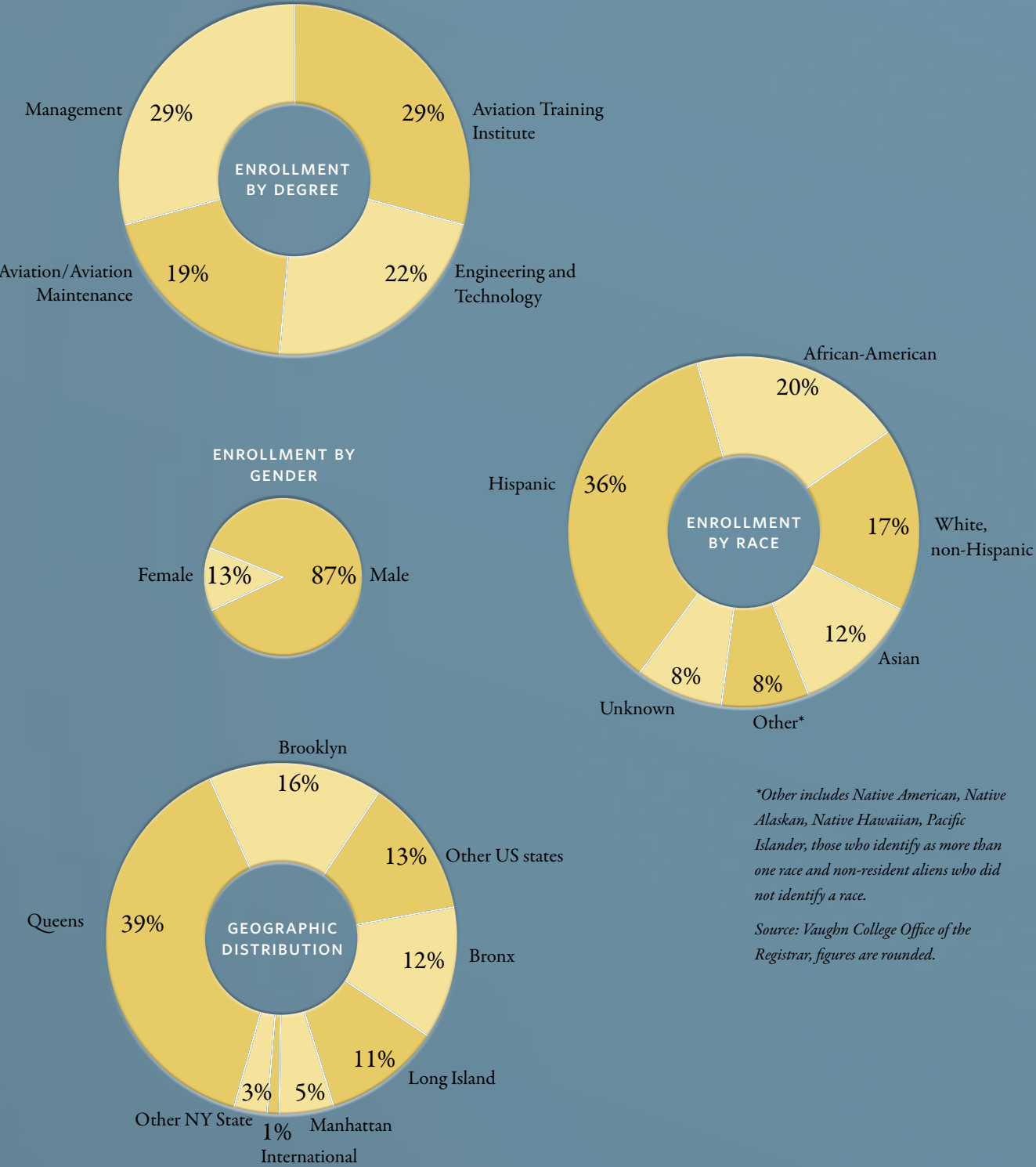
**Amanda Talty**, assistant vice president of development and alumni affairs



# VAUGHN COLLEGE REPORT 2011

Demographics, Financial Summary and Annual Fund

## DEMOGRAPHICS



## FINANCIAL SUMMARY

### BALANCE SHEET

	2011	2010
Total Assets	\$61,100,913	\$61,070,850
Total Liabilities	\$44,792,546	\$46,575,790
Total Net Assets	\$16,308,367	\$14,495,060
Comprised of		
Unrestricted	\$13,647,783	\$12,012,474
Temporarily Restricted	\$2,538,445	\$2,360,747
Permanently Restricted	\$122,139	\$121,839
Total Net Assets	\$16,308,367	\$14,495,060

### REVENUES AND EXPENSES

	2011	2010
<i>Revenues</i>		
Tuition and Fees	\$24,868,891	\$20,272,742
Less: Scholarships and Fellowships	\$2,891,020	\$2,025,981
Less: Federal Aid	\$127,221	\$140,286
Net Tuition and Fees	\$21,850,650	\$18,106,475
Government Grants and Contracts	\$4,106,364	\$6,491,988
Contributions, Including Equipment	\$99,734	\$374,118
Investment Income	\$406,509	\$391,322
Auxiliary Revenue	\$1,980,938	\$1,501,929
Appreciation (Depreciation)		
In Fair Value of Investments	\$1,491,317	\$883,830
Other	\$89,768	\$83,159
Total Unrestricted Revenues, Gains and Other Support	\$30,025,280	\$27,832,821
<i>Expenses</i>		
Educational and General	\$25,688,503	\$24,048,660
Depreciation and Accretion	\$2,701,468	\$2,313,984
Total Expenses	\$28,389,971	\$26,362,644
Non-Operating Activities: Board-Designated Grant		(\$645,000)
Change in Unrestricted Net Assets	\$1,635,309	\$825,177
Increase (Decrease)		
In Temporarily and Permanently Restricted Assets	\$177,998	\$1,340,284
Change in Net Assets	\$1,813,307	\$2,165,461

### AID AWARDS TO ENROLLED STUDENTS, 2009-2010, 2010-2011

	2010-2011	2009-2010
<i>Scholarship and Grants</i>		
Federal Grants	\$7,319,490	\$4,415,103
State Grants	\$2,752,770	\$3,728,246
Institutional Grants	\$2,826,639	\$2,280,557
Scholarships From External Sources	\$75,134	\$127,451
<i>Self-Help Programs</i>		
Student Loans	\$8,924,165	\$7,499,726
Federal Work Study	\$97,297	\$179,408
<i>Other</i>		
Parent Loans		\$818,286
Total		\$19,048,777

## When you give back, we move forward.

Vaughn has long been a beacon of opportunity to allow young people—many of whom come from families of modest means—to fulfill their ambitions.

However, tuition only covers a portion of what the College needs to sustain and enhance its tradition—providing an innovative and challenging learning environment with first-rate teaching classrooms and laboratories that take advantage of new technology and are taught by world-class faculty.

Gifts to the annual fund ensure that all students receive a high-quality Vaughn education that will prepare them for their future careers. Our goals include:

- Building for the 21st century: Renovate and construct additional modern facilities, laboratories and classrooms that support and enhance multidisciplinary collaboration.
- Developing tomorrow's leaders: Create innovative curriculum that engage students at the intersection of theory and practice.
- Connecting academia to the real world: Increasing the opportunities for our students and faculty to participate in educational programs, conferences and internships that tie classroom learning to hands-on experiences.

**To make your gift to the Vaughn College annual fund today, please visit [www.vaughn.edu/give-a-gift.cfm](http://www.vaughn.edu/give-a-gift.cfm) or call 718.429.6600 ext. 204.**

*Jessenia Diaz '11 is now an air traffic controller at John F. Kennedy International Airport.*

### ANNUAL FUND GIVING *(September 1, 2010 through August 31, 2011)*

#### THE FOUNDERS CLUB

*\$2,500 and beyond*

Aviation Development Council, Inc.  
Elaine Asch-Root  
Federal Surplus Property  
jetBlue Airways  
Shelley and Jeff Kehl  
Kenneth E. Senior Aerospace Scholarship Foundation  
Thomas Marotta  
Oswin Moore  
Strato Publishing  
The Wings Club

#### THE LAGUARDIA CLUB

*\$1,500 to 2,499*

Julian Earls  
Monroe Hatch  
Clyde and Hazel Lee Kizer  
James Vaughn  
George A. Vaughn, Jr.

#### THE PRESIDENT'S CLUB

*\$1,000 to 1,499*

Barnes & Noble  
Empire Avionics  
John and Deirdre Fitzpatrick  
JFK IAT  
Thomas McKee  
Strato Publishing Co.

#### CHARLES (CHUCK) E. YEAGER CLUB

*\$500 to \$999*

Paula P. Busch  
Anne C. Crudge  
Albert Longarini '49  
Vincent Longarini '85  
Frank Rosenberg  
Joan and Bob Rosenblum

#### THE CHARLES E. TAYLOR CLUB

*\$250 to \$499*

Anonymous  
Thomas Apperson  
Earl Dawson

Sharon B. DeVivo  
John Enders  
Mortimer Sickles '54  
Robert Waldmann  
Joseph and Grace Werner '57  
Robert and Irene Zincone '55

#### THE BESSIE COLEMAN CLUB

*\$101 to \$249*

Thomas Asch  
Michael and Sherry Chrissanthis '53  
Leroy and Joaquina Dike '66  
Jean Francois '96  
Richard and Jean Goganian  
Pierre Haan '58  
Clarence Lohse '49  
Linda Orlady  
Darlene Orlov in Memory of father, Sol Orlov '37  
Ernie Shepelsky  
James Tierney '56

#### THE CHARLES LINDBERGH CLUB

*\$51 to \$100*

Andrew Asch  
Bank of America  
Peter Bohn '90  
Paul Burnsky '41  
Louis Fazio '59  
Patrick Hamill '71  
George Hogg '68  
Robert H. Hull '07  
Carl and Geraldine Kijowski  
Kalli Koutsoutis  
Robert P. Laden  
Patrick Liganga '03  
Maxine Lubner  
Khalid Mouaouya '90  
Verdia Noel  
Adeyinka A. Osunnuyi '05  
Thomas Pape '48  
John Peraza  
Louis Popovich '51

Hossein Rahemi  
Gerard Sedlak '73  
Agam Sinha  
Laurakaye Stewart  
Efrain Vazquez '82  
Miriam Wolfson

#### DONORS

*\$50 or less*

Joseph Amoroso '59  
Mohammad Anwar '11  
Christine Ashman in Honor of Charles Benoit '11  
Vandita Banka '11  
Joseph Brito Vargas '08  
Farah Burnett  
Frank Carnevale '89  
John Caulfield '59  
Raffaello Cecere '07  
Niamul Choudhary '11  
Anwar Choudhary '11  
Thomas Clark '57  
Jamie Contreras '11  
Santiago Cortes '11 in Honor of Marcos Cortes '11  
John M. Csady '61  
Giovanni Delgado '11  
Marisa Diaz '11  
Charlene Dodson  
George Fager  
Charles Farley '66  
John Forderaro '53  
Ramong Fraser in Honor of Marshall Stevens  
Newton Gabbidon '11  
Robert Gensinger '64  
Menelik Gooden '11  
Neil Gouveia  
Arthur Guiducci '52  
Luis Herrera '11  
MD S. Hossain '11  
Julien Jeong '11  
Arthur Johann '82  
Sebastian Joseph '11

Joseph Kamel '11  
Sandip Kaur '11  
Waqas Khizar '11  
Laura I. Lowy  
John P. Lozowsky '55  
Mahdi Macbhai '11  
Gloria Manning In Honor of Heather Manning '11  
William Marriot '66  
Joel Mathew '11  
Michael McCarthy '73  
Mark Meertens '94  
Asad Mustafa '11  
Gazal Nagi '11  
John Neglia '66  
Marshall Novick '56  
Thomas Perno '71  
Evelyn Puma '11  
Mimi Raj '11  
Jason Reyes '10  
Walter Rommel '96  
Henry Salinas '11  
Rafael Sanchez '11  
Frederick Schlichtmann '49  
Harold Shapiro '56 in Memory of John DeNicola  
Juliet Shum '11  
Gurpreet Singh '07  
Walter Smith '58  
Michael Stewart '11  
Luis Torres '11  
John Tristani '58  
Francisco Tunas '11

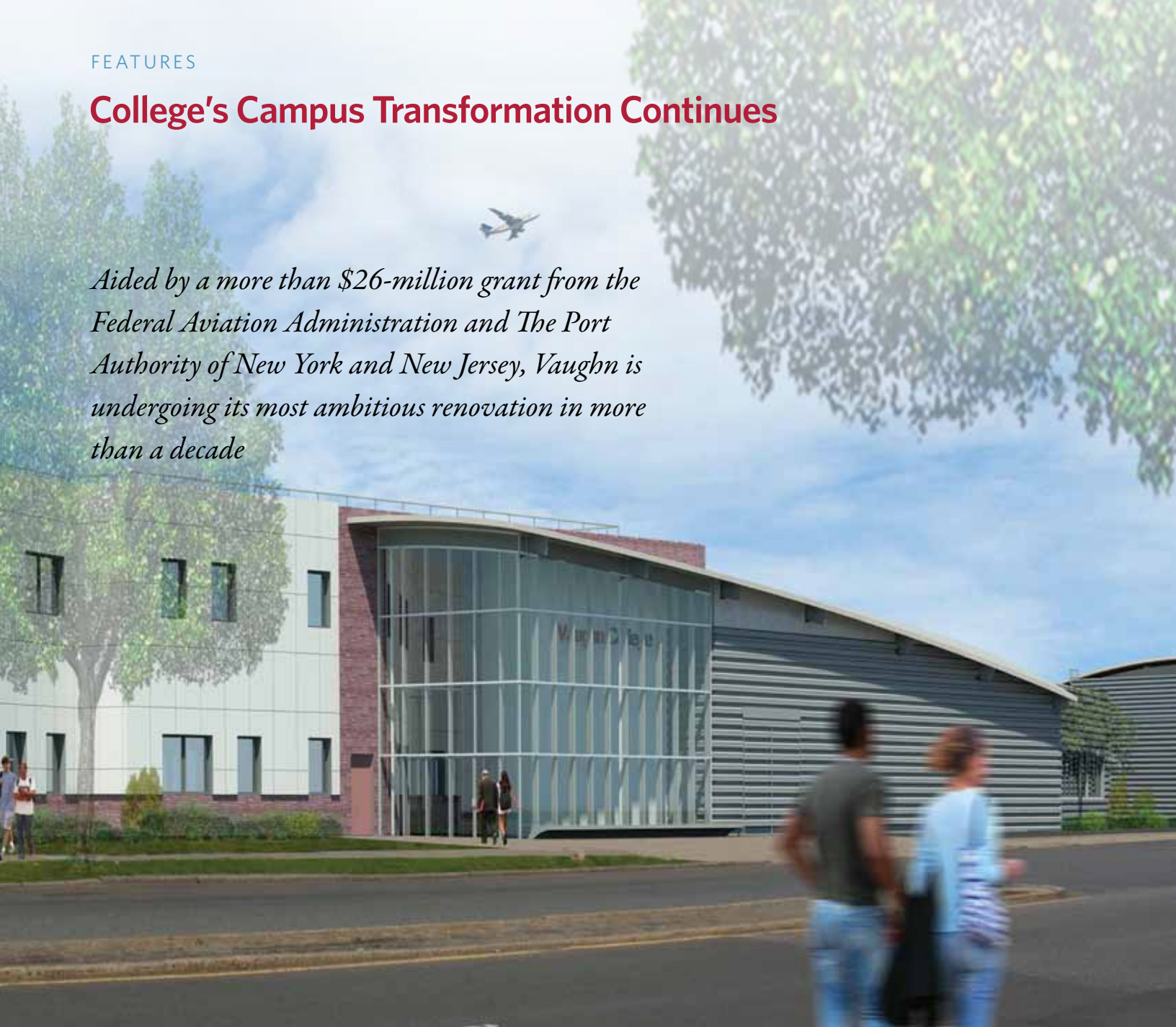
#### MATCHING GIFT COMPANIES

Consolidated Edison Company of New York  
IBM  
Marotta Controls, Inc.  
United Technologies



## College's Campus Transformation Continues

*Aided by a more than \$26-million grant from the Federal Aviation Administration and The Port Authority of New York and New Jersey, Vaughn is undergoing its most ambitious renovation in more than a decade*



Shovels are in the ground and hard hats are visible across the campus as Vaughn begins the first phase of a more than two-year soundproofing project.

"We're excited to be entering this new phase of our development," President John C. Fitzpatrick said. "The project speaks to the College's continued commitment to improving our campus to reflect the significant curriculum changes we have made over the last 10 years. Our physical

appearance will now match our new degree programs, teaching pedagogies and growing enrollment."

Included in the soundproofing redesign are plans to lower noise and vibration levels throughout the campus through new ventilation and heating systems, new roof and windows and a new exterior façade. In the short-term, the project is impacting parking, classroom and laboratory space, but the extensive renovations will have a

long-term improvement in a quieter and more favorable learning experience for students and faculty.

Phase I of the six-phase soundproofing project includes a new building on the west end of the main campus building that will house the mechanical systems that will feed the rest of the campus. This phase is expected to be completed in late June with significant work scheduled for the main hallway during the summer and fall of 2012.

## Artin Shoukas, Class of 1964, is a Medical Pioneer

*Engineer, physician and researcher is a world-recognized expert on the impact of space travel on human health*

A lifelong passion for engineering and a love of biomedical research have led class of 1964 graduate Dr. Artin Shoukas from the halls of the Academy of Aeronautics to John Hopkins Medical Center, where he has pioneered innovative research on the human body for NASA.

"The study of blood flow is not that different from the study of air flow and aerodynamics," said Shoukas, a medical doctor, professor and researcher who graduated with an associate degree in design technology. "You are moving a liquid through a chamber or over a wing. It's all the same."

Born in Long Island City, Queens, Shoukas, 70, was always fascinated with the application of engineering. His studies at the Academy provided a foundation that followed him to Brooklyn Polytechnic Institute for his bachelor's degree and then to Case Western Reserve University for his medical degree. Shoukas taught at the Academy of Aeronautics in the mid-1960s in the design-engineering department. He credits the Academy with establishing the intellectual curiosity he carried with him to medical school and into his research career.

His career has been devoted to years of medical research practice and the study of the impact of long-term space flight on the human heart. His research even took him into space, and Shoukas is considered an expert on the impact of interplanetary exploration on the human cardiovascular system. In 2003, six years of his work

examining the ill effects of space travel and zero gravity on lab rats, was lost when the space shuttle Columbia disintegrated along with its crew.

One year later, when President George W. Bush's administration considered the idea of a mission to Mars, his staff consulted with Shoukas' group, the National Space Biomedical Research Institute. Examining the impact of cosmic radiation on organ systems, including the heart and vascular systems, was a necessity.

"The human factor in going to Mars is that when you leave the Earth's orbit you leave the cocoon where radiation is not a problem. Outside of the Earth's orbit, it is a problem."

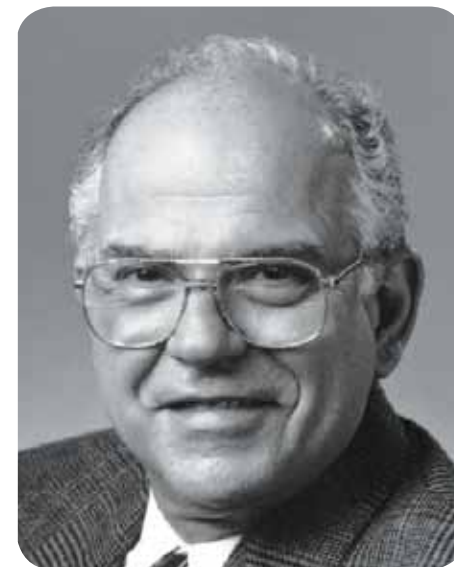
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*I call engineers 'tinkerers.' I tinker with the processes of the human body.*

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As an instructor at Johns Hopkins Medical School, he helped to develop the department of biomedical engineering, whose mission is to improve human health through the union of engineering, biological and medical principles. "I call engineers 'tinkerers.' I tinker with the processes of the human body."

Recent research by Shoukas has taken a more personal turn. After undergoing coronary bypass surgery, he began to search for the cause of the loss-of-taste phenomenon many bypass patients endure. His research



found that cyclohexanone, a chemical used in the production of plastic medical devices, including intravenous bags and catheters, impaired heart function in rats.

The education he acquired at the Academy helped him design and build a model nicknamed "plastic dog" to serve as a learning tool for his current students. The 25-year-old model is used to conduct experiments to understand pressure, volume and flow changes in the circulatory system, and when hooked to a computer, mimics neural interactions between the brain and cardiovascular system.

"The equipment we build for our students to test at Johns Hopkins, that process of building is the same as what I started with from the aircraft design program at the Academy of Aeronautics," Shoukas said. "It's the same as designing a medical device."



## James Vaughn, Son of One of the College's Founders, is Helping to Preserve Pan Am's History

Its history has been told in books, on television and on the big screen. But popular culture only touches the surface of what made Pan Am among the most glamorous airlines ever to fly.

So says James Vaughn, one of the airline's leading historians, Vaughn College benefactor and the son of George Vaughn, one of the College's founders.

According to Vaughn, Pan Am's legacy is firmly rooted in the people who for seven decades made it one of America's most compelling corporate success stories.

"The culture there was unique," said Vaughn, who spent three decades as an executive in Pan Am's cargo division. "We all worked together; each person had his area of responsibility and each person had to accept responsibility. That's how Juan Trippe ran the airline."

Pan Am flew the international skies from 1927 until its bankruptcy in 1991. Denied domestic routes by the federal government until the 1980s, it struggled in the deregulation era and ultimately collapsed three years after its bleakest moment, the terrorist downing of Flight 103 over Lockerbie, Scotland.

But the mythology surrounding the first US carrier to begin jet service has never subsided. Vaughn's group, the Pan Am Historical Foundation, preserves the legacy of chief executive Juan Trippe's vision and keeps connected those for whom Pan Am was more than merely a place to work.

Two decades after the final Pan Am flight, Vaughn's historical organization claims hundreds of pages of original Pan Am correspondence, maintains a robust

website, online museum and even sponsors a bimonthly lunch in Manhattan.

"I had always been fascinated by history," Vaughn said. "But I didn't know the depth of Pan Am's history until I joined the company (in 1957). It really is a legendary American business."

Pan Am aircraft were the first commercial planes to complete a trans-Pacific flight (in 1934); the first to complete a trip around the world following an equator route (1941); the last to leave Saigon after the fall of South Vietnam (1975) and the last to depart Tehran, Iran after the seizure of the United States embassy (1979).

Less famously, Pan Am also introduced Irish coffee to most Americans, served on its flights from Ireland beginning in 1942; hosted the first American president to fly abroad (Franklin Roosevelt in 1943); and was the airliner for the Boeing Corporation's signature widebody, the 747. Pan Am was also the first airline to establish a distinct economy, or "tourist" class, changing the economic landscape of the industry forever.

"These stories are all part of the Pan Am legacy, and we want to keep that going," Vaughn said.

James Vaughn's organization served as pre-production consultants to the ABC series "Pan Am" and has contributed to the scores of books written on the airline's history. The ABC series examined life at the airline during its most glamorous period, the early 1960s. Vaughn College faculty served as technical advisors prior to the show's September 2011 premier, using the college's flight simulator lab to demonstrate cabin interaction.



"The person who came up with the concept of the show (Nancy Hult Ganis) was a Pan Am flight attendant," James Vaughn said proudly.

Closer to Vaughn College, the mural "The Legacy of Pan American World Airways" adorns the Marine Air Terminal at LaGuardia Airport, from which Pan Am's legendary flying boats and globe-trekking Lockheed Constellations took off.

An Air Force veteran and Colgate University graduate, Vaughn worked for Pan Am from 1957 to 1987. He formed his own cargo company after leaving the airline, retiring in the mid-1990s. He now lives in Essex, Connecticut.

*James Vaughn and his group, the Pan Am Historical Foundation, erected a tribute to the airline at the Marine Air Terminal at LaGuardia Airport.*

His current title, vice president and regional managing director of the historical foundation, affords him plenty of opportunities for reflection. Among his colleagues is foundation Chairman Edward S. Trippe, son of Pan Am's great visionary.

"The atmosphere at Pan Am was very exciting," James Vaughn said. "It was a challenge at times, but looking back everyone was proud of the achievements."  
—James Stephen Smith

## Engineering Professor Dr. Shouling He and Vaughn are an Ideal Match

In 2011, Vaughn College recognized that hiring a professor knowledgeable in mechanical, electronic and computer engineering was essential to the continued development of its mechatronics program.

That summer, it found a professor with the credentials in engineering it was searching for.

Dr. Shouling He, hired later that year, said stepping into her role as an engineering professor was "exciting" and "exactly what I'm passionate about teaching. The position matched my background perfectly."

Prior to joining Vaughn, He's educational background spanned China, Germany, Canada and various parts of the United States. She spent eight years at China's Changfeng Mechanics and Electronics Technology Academy, rising to the title of senior engineer.

An opportunity to serve as a visiting scholar took her to Erlangen, Germany, where she earned a PhD in electrical engineering. A move to Winnipeg, Canada, followed, where she completed work toward a second PhD. Her teaching career began as an assistant professor of computer science at the University of North Dakota in 2001.

Eager to return to her roots in engineering, in 2002 He accepted an offer from Penn State University's Erie campus as assistant professor of electrical and computer engineering, where she developed new courses in



microprocessors, digital control systems and embedded systems.

He has published in scholarly journals that include *IEEE Transactions on Neural Networks*, on such topics as neural networks and applied artificial intelligence.

According to Dr. Hossein Rahemi, chair of the engineering and technology department, "Dr. He goes above and beyond to help her students. She's not only excellent in her field, but she is an extremely dedicated faculty member and takes time to work closely with students."



# Alumnus' Scholarship Honors His Mentor and Former College President Walter Hartung

The legacy of Walter Hartung, war hero, aviation leader and former president of the Academy of Aeronautics, is being remembered in a \$50,000 annual scholarship established by an alumnus grateful for Hartung's impact on his life and wartime contribution. Designated as the Walter Hartung Memorial Scholarship, the goal is to assist students in achieving their goal of a college degree.

In the fall of 2011, Vaughn College was contacted by the former student who had graduated from the Academy during World War II. Hartung was instrumental in helping him obtain admission to Officer Candidate School, going on to serve in the Pacific Theater as a commissioned officer in the Air Transport Command. After the war ended, the alumnus went on to have a successful civilian life—and he wished to privately recognize the man who had helped him so profoundly.

The Walter Hartung Memorial Scholarship is designed to provide eligible students direct and meaningful aid to pursue their educational goals. It is open to Vaughn College students in a bachelor of science program who maintain at least a 3.0 grade point average and demonstrate financial need. The awards will vary in size based on the student's need and students will be eligible for the award as long as the required grade point average is maintained.

President Dr. John C. Fitzpatrick noted, "This significant gift to the institution will have a direct and tangible impact on the students who are the recipients of the Walter Hartung Memorial Scholarship, and for that we're grateful." Dr. Fitzpatrick also knew and worked for Hartung and remembers him as a driving force to move the institution to the collegiate level.

Hartung, an aviation educator with a background in engineering, joined what was then the Casey Jones School of Aeronautics in 1933 six months after the institution opened in Newark, New Jersey. He proposed the nation's first aircraft design curriculum that quickly became among the institution's most popular programs.

Later, as a colonel in the Army Air Corps during World War II, Hartung directed the Air Transport Command (ATC) in the Pacific Theater, where he won multiple Bronze Stars for heroism. The ATC was responsible for evacuating wounded from battle sites in the South Pacific, and transporting them to the United States for medical treatment. The donor of the scholarship served on Guam, heading maintenance of the C-54 planes that were specially outfitted with tiered litters to transport severely wounded soldiers home. They stopped on Guam for needed engine maintenance before making the long



over-water flights to the Johnston Islands, Honolulu and San Francisco.

The donor of the scholarship was one of many alumni who served in the Army Air Force during the War. Recognizing the quality of Casey Jones School graduates, Hartung strategically placed at least one of them on every island in the Pacific controlled by the Allies. By the end of war, in August 1945, Casey Jones School graduates were stationed at key bases throughout the Pacific Theater.

Hartung returned to civilian life knowing that during the war, the Casey Jones School supplied some 20,000 technicians to the war effort. Two decades later he assumed the presidency of what had become the Academy of Aeronautics.

# Scholarship in Memory of Aerospace Engineer Kenneth Senior Delivers a Lasting Gift

Kenneth Senior left a legacy so large that only a unique scholarship opportunity could fill it. The former aerospace entrepreneur worked on the Apollo lunar lander, founded his own company on Long Island and grew it to international recognition. He raised a family, employed hundreds in the area and even attended inaugural balls for President Ronald Reagan.

His death in January 2008 left his family wondering how best to memorialize him. That's when the idea for the Kenneth Senior Aerospace Scholarship Fund was born.

"We wanted something to do with aerospace," Maria Senior, Kenneth's sister-in-law, said. "We also wanted it to be close to Long Island. We found Vaughn College and it was the perfect fit."

Kenneth Senior left a lasting imprint on the aerospace industry on Long Island that will be felt into the future. Since 2010, the Kenneth Senior Aerospace Scholarship Fund has awarded four \$10,000 scholarships to Vaughn College students enrolled in bachelor of science degrees. Recipients are incoming students who must be in the top 20 percent of their high school class and demonstrate financial need.

The award funds more than half of the winning students' annual tuition. The 2010 winners were Robert Andersen and Jennifer Rosati; 2011 winners were

Zechariah Gajadhar and Thomas Pekar. The 2012 recipients will be announced after the foundation's fund-raising golf outing in May.

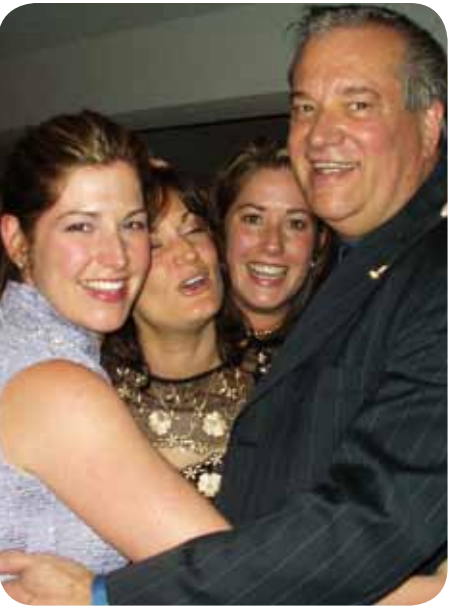
Gajadhar, a freshman engineering student, and Rosati, a sophomore studying mechanical engineering technology, agreed that the scholarship aided their transition to college life, easing the financial burden on their families.

"Without the tuition cost hanging over my head I could just concentrate on my studies," Gajadhar, a Jackson Heights, Queens resident, said. "It was also a great feeling of accomplishment to know that I was being honored by a man who made an impact in the field I will pursue."

Rosati added, "The scholarship meant being able to stay here all four years with my friends in a college I really love."

That is precisely the impact the Senior family hoped to make. "We wanted to aid someone's education," said Bridgette DeMinico, one of Kenneth Senior's three daughters. "We felt this was the best way to do that and we also wanted the award to have a substantial impact on a student and we believe \$10,000 accomplishes that goal."

Kenneth Senior studied engineering at City College (CUNY). At 24, he was recruited to work on NASA's lunar lander; experience gained there led him to establish Alken Industries in 1968.



During his life, the company grew from an 80-square-foot office to a 52,000-square-foot facility in Ronkonkoma.

According to his family, Kenneth Senior would have appreciated donating to Vaughn not only for its focus on aerospace sciences, but also because so many students are among the first in their families to attend college.

His sister-in-law noted, "He always appreciated someone who would go above and beyond to put themselves through college."

## In Their Own Words... *Four Vaughn College scholarship recipients describe what receiving the awards means to them*



**Daniel Turner '15, 2012 Walter Hartung Memorial Scholarship**

*It's an honor and a blessing to be the recipient of this scholarship. It has helped to propel me into my career path (aviation) and has caused the foundation of my dream to come true. This is truly one of the most exciting and satisfying times of my entire life and I will always be thankful to those who awarded me this scholarship.*



**Erika Barcenes '13, 2012 Walter Hartung Memorial Scholarship**

*It was such a great privilege to be selected for the award. Without scholarship patrons, there would be many students such as myself unable to pursue their desired careers. This scholarship has helped me fulfill my lifelong dream of a college education and to pursue a career in which dreams really come true. My parents and I are overjoyed. I promise that I will work very hard in the future and give back to others.*



**Robert Andersen '13, 2010 Kenneth Senior Aerospace Scholarship Fund**

*The cost of all four years of college scared me. Receiving the scholarship made me extremely happy and put me at ease. When I was told I was the recipient of a scholarship totaling \$10,000, I was in shock. I called my parents to tell them what I was receiving and they almost did not believe me. The scholarship has significantly changed my financial burden and it will be a huge help in the future.*



**Jennifer Rosati '15, 2011 Kenneth Senior Aerospace Scholarship Fund**

*My scholarship eased the financial burden for my first year in college. It also meant being able to stay here all four years with my friends in a college I really love. That meant so much to me.*



# Newest Board Members Help Chart College's Future Direction

*Katherine Posner and Agam Sinha share a common desire to serve Vaughn College*

Vaughn College's newest board members are among industry leaders in their respective fields. Both will use their experience to assist in shaping the future direction of Vaughn College.

"I was looking to transition from community activities to something that had a different kind of focus," Katherine Posner said. "After I was approached about joining the board of trustees and I spent some time with President John Fitzpatrick, I fell in love with his enthusiasm and that of the students. I was really excited to think I could become a part of that."

Posner, a graduate of McNeese State University and the University of Wyoming's law school, is considered one of the leading aviation attorneys in the world. A partner at the litigation firm Condon & Forsyth in Manhattan, she concentrates on insurance and reinsurance work and on commercial litigation. She becomes the fifth woman on the board and the only practicing attorney.

"I wanted to be involved with Vaughn in more than name only," Posner said. "After talking with board members Elaine Asch-Root and Susan Baer, I sensed this would be a good fit."

Agam Sinha leads the Center for Advanced Aviation System Development at the nonprofit MITRE Corporation and is director of the Federal Aviation Administration's (FAA) Federally Funded Research and Development Center. These

groups work with global authorities to address operational and technical challenges in aviation using engineering solutions.

Born in Bihar, India, a few decades ahead of that country's technology explosion, Sinha earned a bachelor's degree in mechanical engineering from Indian Institute of Technology in Bombay, earned

*The determination of the students here is amazing. Many of them come from challenging backgrounds, which can make it difficult to succeed—yet they do. They are very impressive.*

masters' degrees from American University and the University of Minnesota and a doctorate from Minnesota. He joined MITRE in 1972.

"I didn't want to just sit on the board here," Sinha said. "I wanted to contribute something. After I got a better feel for the College, I recognized that joining the board meant that I could have an impact in a very positive way."

As a Vaughn board member, he is interested in applying his broad-based knowledge to assist students in developing



the next generation of engineering technologies. Vaughn's dedicated student population and robust engineering curriculum is what ultimately attracted him to the college.

"The determination of the students here is amazing," Sinha said. "Many of them come from challenging backgrounds, which can make it difficult to succeed—yet they do. They are very impressive." The challenge for the College, he said, is to grow while maintaining the culture that is uniquely Vaughn.

# College Remembers a Leader and Friend

*Robert Zincone, Class of 1955, led Sikorsky, served on Vaughn's board and endowed a scholarship*

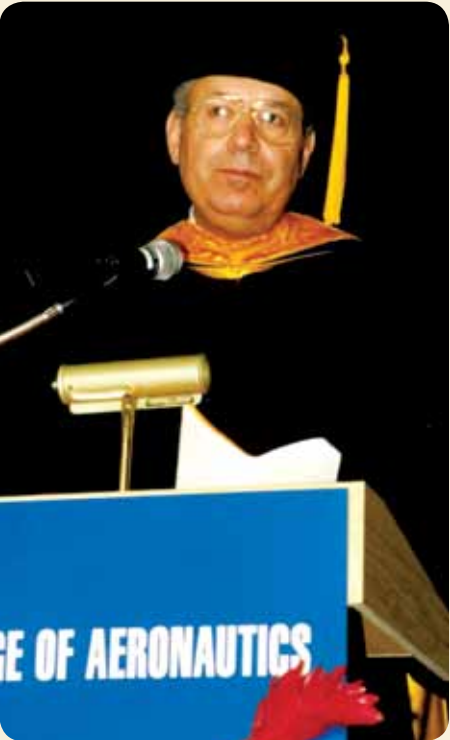
Robert Zincone never forgot the institution that gave him his start in the aviation industry.

A 1955 graduate of the Academy of Aeronautics who went on to become president of Sikorsky Aircraft Corporation, he gave his time and charity to the institution generously until his death on March 31. Friends of the College remembered the former Board of Trustees chair as an industry visionary whose contributions to Vaughn were invaluable.

"Robert Zincone was an industry leader and true friend to the academic institution where he attended as a student and served throughout his lifetime," Vaughn President Dr. John C. Fitzpatrick said. "Bob was fond of reminding students that lifelong learning was an essential aspect to his long-term career success. His insights as an alumnus and successful businessman were invaluable in helping lead this institution through remarkable transformation."

After graduating from the Academy of Aeronautics, Zincone, 78, received a bachelor's degree in mechanical engineering from the University of Bridgeport and a master's degree in engineering mechanics from Columbia University. He was an Air Force veteran, a fellow at the American Institute of Aeronautics and Astronautics and past chairman of the American Helicopter Association.

Considered one of the fathers of the Black Hawk helicopter, Mr. Zincone began a 37-year Sikorsky career in 1955 as an engineering trainee. He became program manager for the company's Black Hawk and S-76 helicopter projects, then senior vice president for research and engineering, executive vice president and ultimately president in 1984. He later became senior vice president of Sikorsky's parent company, United Technologies Corporation.



*Robert Zincone, who received an honorary doctorate from Vaughn College in 2007, served on the College's board from 1988 until his death in March.*

Zincone joined the board of the College of Aeronautics in 1988 and served as chair from 1999 to 2002. Under his leadership, the College conducted its first institution-wide strategic planning initiative, which became the foundation for much of Vaughn's recent success, including the addition of the first residence hall, a bachelor of science in engineering and a graduate degree in management. The investments made in campus infrastructure, programs and faculty have led to a more than 60 percent increase in enrollment over the last four years.

While at Sikorsky, Zincone received the United Technologies' George Mead Award for his development of titanium rotor blade technology. Later in his life, he became an aerospace technology consultant and chief technology officer for an innovative solar energy distributor, SunPort Industries.

Friends and colleagues acknowledged what set him apart was his generosity to Vaughn and the students it serves. Zincone

and his beloved wife, Irene, who survives him, endowed the Robert and Irene Zincone Scholarship in 2003. The award is given annually to an entering freshman who demonstrates academic success, community service and financial need. In recognition of his tireless efforts on behalf of his alma mater, Zincone received an honorary doctorate from Vaughn in 2007.

"Bob Zincone was not only a graduate of the College, but he and Irene have been very generous to Vaughn through their dedicated leadership roles and their efforts to help our students pursue their dream of a college degree," noted current Board Chair Thomas McKee. "He will be missed but not forgotten."



## Alumni Events

### BOWLING

New members of the alumni association scored a strike when they attended our annual bowling event at Frames Bowling Lounge in New York City. The recent graduates were excited to reconnect with each other and share their experiences of postgraduate life, while enjoying a friendly game of bowling.

Left to right: Kenneth Andwood '09, Noemi Nunez '12, Emmanuel Crespo '10, Myriam Giraldo '10



### WATER'S EDGE

Alumni and friends gathered at the scenic Water's Edge Restaurant in Long Island City for an evening of fine dining and networking. Graduates from various years reminisced about their experiences at their alma mater and recent professional successes.

Left to right: John Martin '94, Kevin McLaughlin '11, Andrew Kneissl '90 and Daniel Woszczak '83

### SPEAKER SERIES

The alumni association invited three accomplished graduates to participate in a question and answer session at Vaughn College. Mahmudul Hoq '07, Kimberly Silver '08 and Jeffrey Time '03 answered questions from students and alumni about their respective careers at Stewart International Airport, the Federal Aviation Administration and jetBlue.

Left to right: Time '03, Silvera '08 and Hoq '07



## Upcoming Events

### METS VS. YANKEES

Friday, June 22, 7:10 p.m.  
Citi Field

Calling all Mets and Yankees fans! Come cheer on your favorite New York team in what is guaranteed to be a thrilling game. Tickets are \$30 and include a complimentary \$12 for concession stand purchases.



### OCTOBERFEST CRUISE

Saturday, October 6, 8:30 a.m. - 5:30 p.m.  
Bear Mountain

Take in the crisp air and breathtaking views as the Circle Line makes its way up the scenic Hudson River to historic Bear Mountain. Enjoy three hours at Bear Mountain's annual Oktoberfest that will feature authentic German food and beer, live entertainment and craft vendors. Visitors can also take advantage of the autumn splendor at Bear Mountain with a boat ride around Hessian Lake, a stroll in the park or a magical ride on the merry-go-round. Boarding is at 8:30 a.m. and the cruise returns to Pier 83 in Manhattan at 5:30 p.m. Rain or shine.

## Alumni Update

### 1949

#### ALBERT L. LONGARINI

"My ties with the school not only include being a graduate of the mechanics and maintenance program but also as an employee of the college from the 1970s to 1990s. I received the Charles E. Taylor Award from the Federal Aviation Administration last year."

### 1951

#### GEORGE OLSON

Died on December 22, 2010 and was interred at the US Military Cemetery in Pinelawn, NY. He is survived by his wife Grace, to whom he was married for 58 years; daughter Christina; grandson George, and his twin brother Robert. He served Aviation High School as an educator for 35 years.

#### JOSEPH TOTARO

"I have been retired from United Airlines since 1992 after 41 years of service. I started with Capital Airlines in 1951 as a load mechanic—three days after my graduation from the Academy of Aeronautics. I have enjoyed my retirement."

### 1956

#### HAROLD SHAPIRO

Joan and Harold Shapiro celebrated their 50th anniversary on January 27, 2011. They have five children and nine grandchildren.

### 1966

#### LEROY DIKE

"I recently retired after more than 40 years in aviation (10 years in maintenance, 30 years in corporate flight crew). I never forgot where it all started – the Academy of Aeronautics. My hope is that every alumnus will have the success that I had."

SAVE THE DATE

Vaughn College

Homecoming

Dinner Dance

Thursday, November 8, 2012

Studio Square New York City

6 p.m.

For more information,

contact Assistant Vice President

Amanda Talty at

718.429.6600 ext. 120

### Send us your news!

Recently married, promoted or relocated?  
Started your own business or switched career fields? Added a new member to your family?  
Share the good news with your friends, professors and classmates at Vaughn—we want to stay connected!

#### Please contact:

Neil Gouveia, Assistant Director  
neil.gouveia@vaughn.edu  
(718) 429-6600 ext. 112

Office of Alumni Affairs, Vaughn College  
86-01 23rd Avenue, Flushing, NY 11369

## Commencement 2012



Newly minted Vaughn College alumni celebrate with the traditional cap toss.



## An Innovative Partnership

### *Second graduating class shows strength of SNIST-Vaughn collaboration*

Completing an educational journey that began in 2008, 181 Sreenidhi Institute of Science and Technology (SNIST)-Vaughn students will become college graduates in June. These students represent the second class to graduate from SNIST-Vaughn since the two institutions began a visionary partnership five years ago.

Vaughn's collaboration with SNIST, in Hyderabad, India, was designed to offer Indian students the opportunity to earn a bachelor of science degree in electronic engineering technology or dual major in airport and airline management from Vaughn College.

"There was a clear need for the program," Heera Singh, head of academic and student affairs at SNIST, said. "There are a number of airports and airlines being developed in India, and people are starting to realize it." India is considered one of the fastest-growing markets in aviation over the next 10 years, according to the Federal Aviation Administration.

According to Singh, employers in the Indian aviation industry recognize the value of SNIST-Vaughn students and graduates. Students are offered paid internships. Many students who perform well during these internships are subsequently recruited into full-time positions. "Seventy-five percent of the first graduating class was offered positions before officially graduating," Singh said, with most getting paid well above India's industry average.

SNIST-Vaughn students have also taken advantage of coming to the United States to complete their degrees. Vaughn's Director of Distance Learning Ray Axmacher, who coordinates the program, notes that the program was built so that students take the same courses whether in Hyderabad or New York, which provides a seamless transfer for interested students. So far, 10 students from India have taken advantage of the chance to study at Vaughn's main campus.

—Christine Mitchell



*President John C. Fitzpatrick presents a Sreenidhi Institute of Science and Technology graduate with his degree.*