

40 Under Forty

Lee Ann Tegtmeyer **Washington** and Heather Baldwin **Phoenix**

In an industry packed with talent, there are some individuals who rise to the top—a rare few who possess an exceptional combination of great leadership skills, technical prowess and business acumen, along with a firm conviction that “good enough” is never good enough.

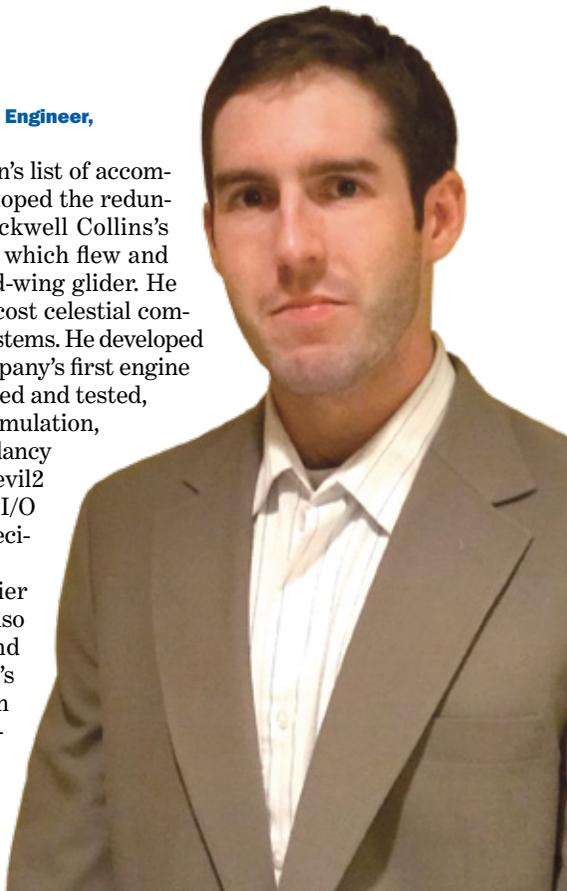
Aviation Week & Space Technology went in search of those talented individuals who are rising stars in the global aerospace and defense industry. To augment our own editors’ contacts, we asked readers to nominate the best and brightest young minds in their organizations. After reviewing nearly 200 contenders, and conducting a healthy internal debate, we had a list of 40 talented individuals who have notched some extraordinary accomplishments before turning 40—and in some cases before 30.

Keith Allen

Senior Navigation and Controls Engineer, Rockwell Collins, Age 27

At just 27 years old, Allen’s list of accomplishments is long: He developed the redundancy management for Rockwell Collins’s first triplex UAV autopilot, which flew and worked flawlessly on a fixed-wing glider. He co-invented Rockwell’s low-cost celestial compass product for targeting systems. He developed adaptive control for the company’s first engine control unit. And he developed and tested, in a hardware-in-the-loop simulation, a triplex remote-node redundancy architecture for the BlueDevil2 blimp containing over 3,000 I/O signals, each with its own specified redundancy algorithm.

Allen is Rockwell’s premier redundancy expert, but he also is adept at flight control and estimation algorithms. “He’s at least two times faster than anyone else, which is impressive, and difficult to keep up with,” says nominator Michael Piedmonte who has supervised Allen. “He is Rockwell’s silver bullet.”



Marc Allen

President, Boeing China, Age 39

Marc Allen has integrated Boeing’s operations, partnerships and relationships in China since taking over as president. He has focused on creating a positive culture where employees are called to seize stretch opportunities, take risks, create and truly contribute.



Allen’s efforts to build a quality team and enduring relationships have enabled him to deliver significant results in a highly complex market that is notoriously difficult to navigate. Under his leadership, Boeing China has rebuilt critical government relationships. It has executed a strategic relationship with Chinese competitor Comac. And the Boeing China team has continued to expand capacity: In the last 12 months, Boeing doubled its components manufacturing capacity at Tianjin, tripled its pilot/mechanic training capacity at Shanghai, delivered its 50th converted 747 freighter out of its Xiamen facility and continued to grow its Shanghai-based MRO business.

Allen became a Boeing vice president at age 34, when he was appointed vice president for global law affairs. Serving in that role as general counsel for Boeing International, Allen developed the company’s international legal affairs strategy, then hired the team to carry it out. Today, that team is a central part of the enterprise law department and an important success story in the implementation of Chairman Jim McNerney’s One Boeing strategy.

“I have been a fan since birth.”

—Marc Allen

To see how some of these 40 got started in the A&D industry, check out the digital edition of AW&ST on leading tablets and smartphones, or go to AviationWeek.com/40under40

Justin Brownlee

Managing Director of Propulsion Maintenance, FedEx Express, Age 34

Justin Brownlee joined FedEx directly out of college in 2000. Eight years later, at just 30 years old, he was selected as managing director-propulsion for FedEx Express, making him one of the youngest managing directors in the company.

In addition to day-to-day leadership of a business unit that is responsible for more than 1,200 engines and 400 APUs, Brownlee led a cross-functional team through a comprehensive reinvention of FedEx’s propulsion management processes. The resulting Propulsion Fleet Management process comprises a series of integrated, cross-functional fleet teams charged with total life-cycle responsibilities for each of FedEx’s aircraft engine types. He accomplished all this while integrating propulsion systems for three new aircraft types—the Boeing 757, 767 and 777—into the FedEx operation.



John Brutnell

General Manager ExecuJet UK, Age 36

Following the sale of London City Airport, where Brutnell was commercial manager, he left to start ExecuJet’s U.K. operation. Under his management, the operation grew from a single Falcon 900EX and five employees in 2008 to its current fleet of more than 50 aircraft, flying on a global scale from its new fixed-base operator location at Cambridge Airport.

Brutnell and his team additionally restructured ExecuJet’s European business and are now responsible for a number of centralized departments that serve ExecuJet’s European and Middle Eastern aircraft operations. Despite difficult economic conditions, ExecuJet, under Brutnell’s stewardship, is seeing an ever-increasing customer base, growing numbers of management aircraft and rising numbers of aircraft using its Cambridge FBO.



Stephane Burton

COO of Supply Chain & Support Sabena Technics, Age 39

Stephane Burton, a graduate of Belgium’s University of Louvain and University of Ghent (Master II in Social, Economic and Tax Law), was named chief operating officer-supply chain and support in March. Burton oversees four departments: global supply chain, human resources, corporate development and legal affairs, and information technology. He was a key player in the takeovers of the maintenance activities of EADS Sogerma Services (Bordeaux, France) and EADS Barfield (Miami), making Sabena Technics a global organization of 3,000 people at 17 sites worldwide.



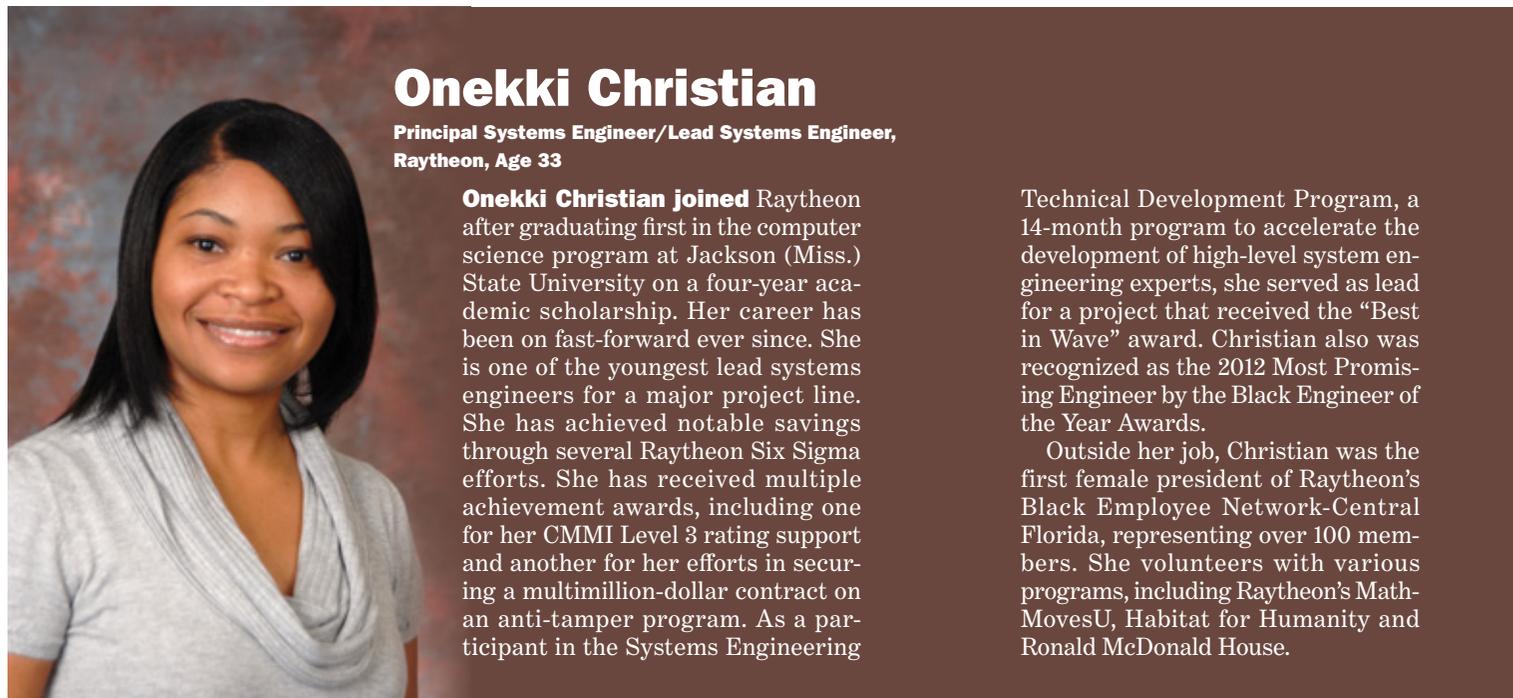
Jonas Butautis

CEO, FL Technics,
Age 37

In just 3.5 years at the helm, Butautis has overseen revenue growth of 500% along with significant improvements in profit margin—all during tough global economic conditions. Under his leadership, FL Technics has expanded into Asia, acquired Storm Aviation (2011), aligned with OEMs through Boeing GoldCare and other similar programs, created hundreds of jobs employing people of 16 nationalities and achieved an unprecedented Customer Promoter Score of 95%.

Less tangibly, Jonas says FL Technics has joined the elite club of MRO opinion leaders. He adds that he is more proud of the investments FL Technics did not make than the ones it did.

“Discipline is key in the times of hyper-competition and overall business uncertainty,” he observes. Going forward, his aim is to deliver on the vision of a true one-stop shop for MRO and local first-choice alternative to global MRO brands.



Onekki Christian

Principal Systems Engineer/Lead Systems Engineer,
Raytheon, Age 33

Onekki Christian joined Raytheon after graduating first in the computer science program at Jackson (Miss.) State University on a four-year academic scholarship. Her career has been on fast-forward ever since. She is one of the youngest lead systems engineers for a major project line. She has achieved notable savings through several Raytheon Six Sigma efforts. She has received multiple achievement awards, including one for her CMMI Level 3 rating support and another for her efforts in securing a multimillion-dollar contract on an anti-tamper program. As a participant in the Systems Engineering

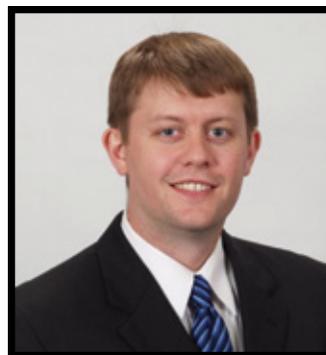
Technical Development Program, a 14-month program to accelerate the development of high-level system engineering experts, she served as lead for a project that received the “Best in Wave” award. Christian also was recognized as the 2012 Most Promising Engineer by the Black Engineer of the Year Awards.

Outside her job, Christian was the first female president of Raytheon’s Black Employee Network-Central Florida, representing over 100 members. She volunteers with various programs, including Raytheon’s Math-MovesU, Habitat for Humanity and Ronald McDonald House.

Carl Dietrich

CEO and Co-Founder, Terrafugia, Age 35

When the FAA enacted the Sport Pilot/Light Sport Aircraft rule in 2004, Dietrich seized the opportunity to address one of the most challenging problems in general aviation: making personal flying safer, more convenient and more appealing to a broader demographic. He founded Terrafugia and developed the Transition, a “flying car” with the capability to fold its wings in less than a minute, be driven on the highway and parked in a standard, single-car garage. Today, his company is operating its second prototype Transition and has racked up more than 100 orders, a \$30 million backlog.



Aircraft for those orders will begin to roll out in the next two years.

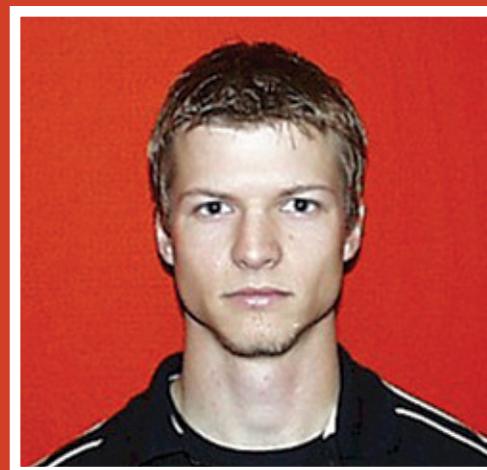
Dietrich is a tireless leader and advocate for general aviation, serving as a voice on Capitol Hill as well as at airports, aviation events and conferences around the world in his quest to enable innovative aircraft concepts and make general aviation accessible to a greater number of people.

David Easter

Senior Instructional Development Specialist/Air Operations, FedEx Express, Age 28

David Easter joined FedEx Express in 2007 and was promoted to senior instructional development specialist in just over a year, at age 24. His degree in computer science has enabled the Technical Operations Training Department to move into a more robust learning environment.

Easter has worked tirelessly to convert the current Technical Operations Training website from PHP to ASP.NET, develop a replacement for the current Training Quality Indicator System, and implement automated electronic student feedback surveys. His development of custom SQL reporting for Air Operations has enabled the department to move from a push system, where training is given to aviation maintenance technicians, to a pull system, where training is requested on an as-needed basis and delivered in a just-in-time fashion. These and other of his technology solutions have helped reduce aircraft maintenance delays and expenses.



Matthew Facchine

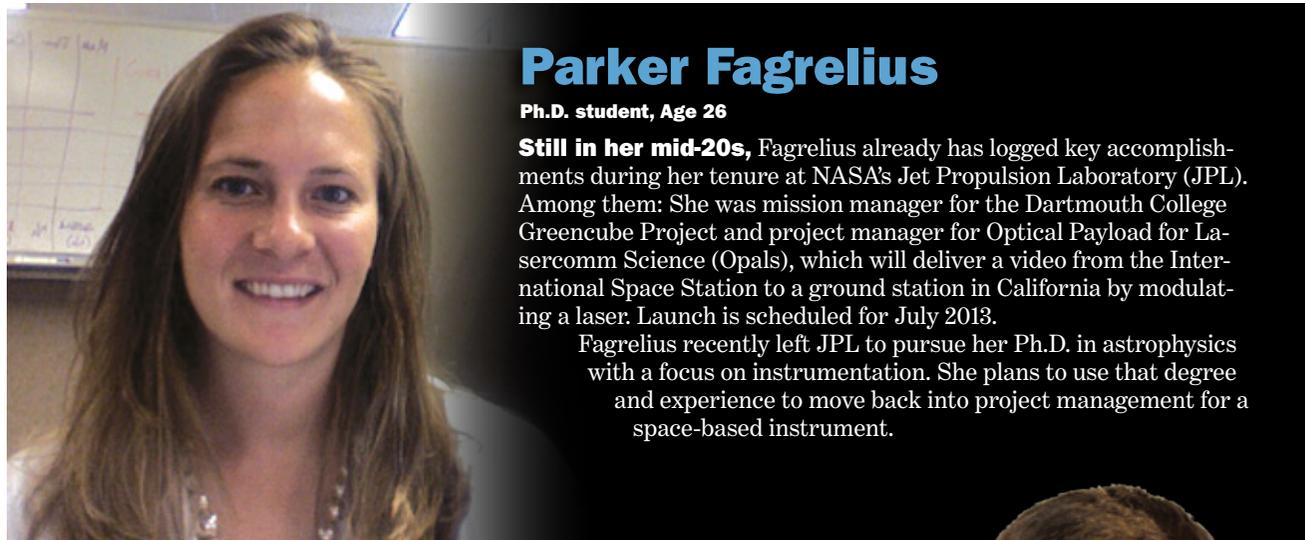
Fellow Systems Architect,
Northrop Grumman,
Age 33

At first glance, Facchine’s experience reads much like that of many engineers. After earning a graduate certificate in systems engineering from the University of Maryland-Baltimore County, Facchine joined Northrop Grumman, where he assumed lead positions on various active, electronically scanned array programs, most recently the Ground/Air Task Oriented Radar. Currently, he serves as technical lead of multidisciplinary teams for the design, development and implementation of sensor system architectures for radar, electronic warfare and communications.

Beyond Facchine’s day-to-day work, he has seven invention disclosures, 14 internal technical publications and seven external technical publications to his name. He also is an enthusiastic mentor to others. Facchine has participated in: the company’s Leadership Training Program as a graduate, facilitator and coach; Business Volunteers Unlimited; and the Getting Involved in Volunteer Experiences program to raise awareness about the growing need for volunteerism in greater Baltimore. He sits on the boards of two nonprofits. Facchine is also passionate about encouraging the next generation of scientists and engineers. Among his extensive

community projects, he helped develop a “Smart-Cart” traveling science and engineering lab to interest middle school students in career paths in science and engineering.





Parker Fagrelus

Ph.D. student, Age 26

Still in her mid-20s, Fagrelus already has logged key accomplishments during her tenure at NASA's Jet Propulsion Laboratory (JPL). Among them: She was mission manager for the Dartmouth College Greencube Project and project manager for Optical Payload for Lasercomm Science (Opals), which will deliver a video from the International Space Station to a ground station in California by modulating a laser. Launch is scheduled for July 2013.

Fagrelus recently left JPL to pursue her Ph.D. in astrophysics with a focus on instrumentation. She plans to use that degree and experience to move back into project management for a space-based instrument.

Amy Gowder

Vice President and General Manager, Kelly Aviation Center, Lockheed Martin, Age 36

Since joining Lockheed Martin in 2005, Gowder has led improvement initiatives in integrated supply chain, performance-based logistics, enterprise resource planning/IT common digital thread, performance excellence and affordability. In the latter area, Gowder, who was director of affordability, led initiatives that resulted in indirect cost reductions of \$2.5 billion over five years. Though that figure encompassed many different functions and teams under Gowder's direction, she personally led and executed an organizational restructuring

that saved \$100 million per year for five years, directly contributing 20% of that \$2.5 billion.

A 2010 Sloan Fellow and MBA graduate of the Massachusetts Institute of Technology, Gowder is a Lockheed Martin Aero Star and Nova winner for execution of the business strategy that established a supply chain center of excellence. In addition, Kelly Aviation was just named a finalist in *Industry Week's* best plants of the year. Going forward, Gowder aims to expand Kelly Aviation Center offerings into the commercial engine MRO market and diversify its military product line.



Robert Hammerquist

Senior Engineer, Mechanical Systems, ITT Exelis, Age 35

After joining ITT Exelis as a mechanical engineering intern in 2002, Robert Hammerquist began a quick rise through the ranks. He earned his master's degree in mechanical engineering in 2005 while working full time, and four years later was promoted to his current position as senior engineer-mechanical systems, ahead of the normal requisite years of experience.

Hammerquist currently leads a critical R&D effort within Exelis, heading the design and development team, maintaining budgets, supporting on-site and off-site development testing, working with ITT Exelis consultants, potential customers, marketing and ITT Exelis defense management. "One of [Hammerquist's] greatest strengths is in building authentic, enduring relationships, and he has the potential to lead the systems organization, if not more, in the next few years," says Jim Barber, the lead of Hammerquist's mechanical systems team.



Luke Hayhoe

General Manager-Commercial, British Airways CityFlyer, Age 31

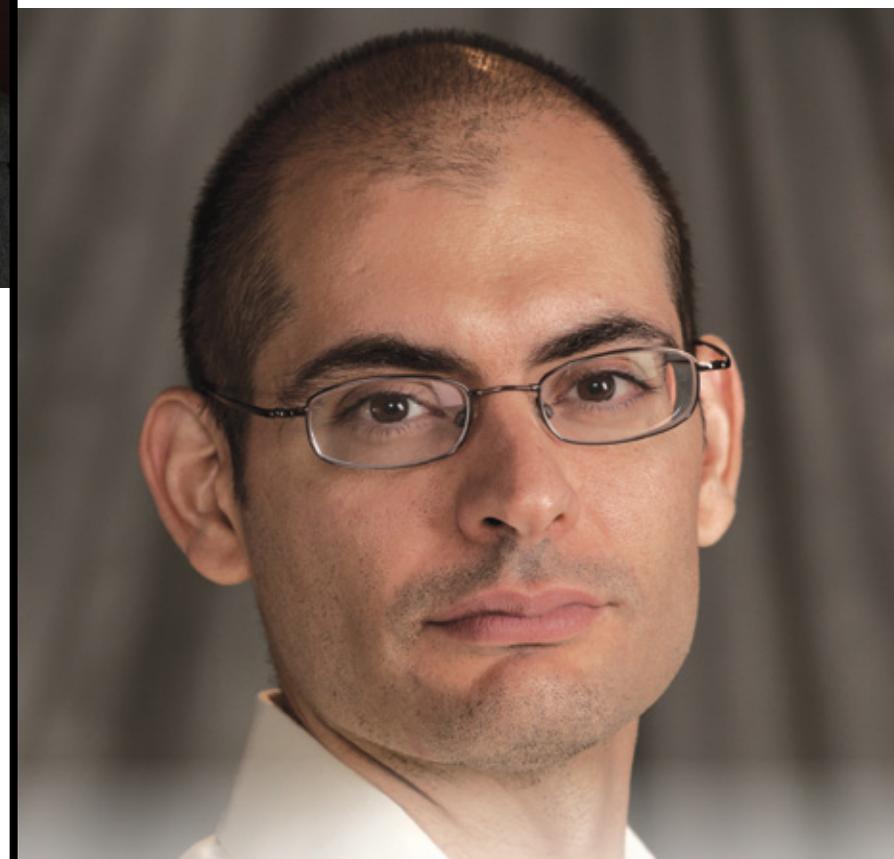
An aviation enthusiast from childhood, Hayhoe's trajectory through the aerospace business has been nearly vertical. After finishing his A-level exams, he joined Brymon Airways in customer services, then trained as a dispatcher. At age 20, he became the youngest-ever customer services supervisor at British Airways. In 2002, he set up BA's Isle of Man ground services support unit; two years later, he was at the regional headquarters in Manchester as a revenue management team leader, then took over running the department.

Hayhoe played a key role in the transformation of BA CitiExpress to BA Connect in 2005-06 and the integration to Flybe in 2006-07. He joined BA CityFlyer (BACF) as commercial manager in 2007 and was promoted to general manager-commercial in the spring of 2011 at age 30. In his current role, he has driven unprecedented commercial growth: BACF is now the largest airline at London City Airport, flying more routes and carrying more passengers than any other carrier there.

Angela Heise

Vice President of Information Systems & Global Solutions-Defense Enterprise IT Services, Lockheed Martin, Age 38

With 15 years of leadership under her belt before age 40, Heise is considered one of Lockheed Martin's rising stars. Prior to assuming her current role, Heise was director of the Army Corps of Engineers IT program, where she led a team of 800 operating two major data centers, supporting over 2,000 field sites, managing 42,000 desktops, servicing 26,000 wireless devices and operating a 24/7 enterprise service desk. Under her leadership, this critical program saw a successful turnaround and Heise received a President's Award for her work. In 2008, Heise was a Lockheed Martin Eagle Award winner for leadership, and a year later won a Nova Award for Full Spectrum leadership, the company's highest leadership award.



Luis Hernandez

Senior Staff Engineer, BAE Systems, Age 37

Luis Hernandez has devoted his career to the development of game-changing directed-energy weapon systems. Today, he has primary responsibility for the development of a technologically advanced and unique weapon system with numerous potential military applications. He has championed company investment in this technology and developed professional relationships with BAE Systems senior leadership and customers. He also assembled and mentored a small team of skilled engineers which, with minimal investment, developed unique systems that have generated sole-source government contracts, garnering his team a number of awards for innovation.

Hernandez is excelling in a challenging master's program in management of technology and "has shown unwavering energy and exceptional time management in balancing his program's needs with his education's demands," says Bruce Olson, Hernandez's direct supervisor and nominator. "Luis is a leader, not a follower, and he is clearly on a path leading to great things."



Jeremy Hochstedler

Senior Electrical Engineer, Raytheon, Age 28

In just over four years at Raytheon, Hochstedler has been involved in research and development, engineering design, modeling and simulation, integration, test and production processes. He was a key technical author on a data-link program proposal and the technical lead of a team that developed a related mobile software application. He also is the lead author on a pending patent for his algorithm design for mobile device applications. In part due to these accomplishments, Hochstedler was selected to join Raytheon's highly competitive Engineering Technical Leadership program and received Raytheon's Innovation Award for inventors for contributions to company innovation in both 2010 and 2011.

Having earned his second master's degree in management science and engineering from Stanford University in June, Hochstedler is now working on his MBA at Northwestern University—all before the age of 30.

John M. Holmes

Group Vice President, Aviation Supply Chain, AAR Corp., Age 35

John Holmes left investment banking and joined AAR Corp. in 2001 to focus on mergers and acquisitions, reporting directly to CEO David Storch at just 24 years old. Today, after a decade of successes and increasing responsibilities, he is a member of AAR's senior leadership team, charged with heading the company's aviation supply chain group.

One of his most notable accomplishments was the turnaround and growth of AAR Allen Aircraft, its airframe parts trading division. In 2003, when Holmes took over as general manager at age 26, Allen was a small group losing money in the post-9/11 downturn. Holmes reorganized the unit's purchasing and sales functions, combined the group with AAR Distribution to form AAR Allen Asset Management, then grew the organization over the next seven years at a compound annual growth rate of 17%, tripling the size of the business.

Last year, under Holmes's leadership, AAR became the exclusive distributor of aerospace parts for Unison and acquired Airinmar Holdings, adding sophisticated component repair management and engineering expertise to AAR's supply-chain offerings. This year, Holmes took on responsibility for AAR's defense systems and logistics business. "I believe our group's expertise is portable," he says. "We plan to merchandise our capabilities to adjacent markets to support new platforms with similar supply-chain requirements."



David Kordonowy

Aerostructures Research Group Leader, Aurora Flight Sciences Corp., Age 31

In the past year, David Kordonowy grew his team from one to nine people and built a portfolio that spans the broadest range of activities in the structures domain, from university-style basic research through product development, design, production and testing.

One of the roles he is most proud of is that of principal investigator on the Damage-Tolerant Unitized Hybrid Structures for Air Vehicles program, where his research will be implemented on Aurora's Orion unmanned aircraft system. Separately, he is involved with the NASA N+3 program on the Massachusetts Institute of Technology team, developing a next-generation subsonic transport aircraft to substantially reduce fuel burn, emissions and noise. The concept won the 2010 *Popular Mechanics* Breakthrough Product award for an innovative design that supports environmentally friendly air travel. Kordonowy performed the structures and material development of the concept at Aurora for MIT and NASA.

"My passion as an engineer," says Kordonowy, "is to develop a 'self-aware' aerospace system capable of using information it collects to make decisions that increase its capability or extend its life."

David Lapeyronnie

Engineering Manager, Pressure and Mass Flow Sensors, Esterline Advanced Sensors, Age 37

After graduating with an aerospace engineering degree from Ecole Nationale Supérieure de Mécanique et d'Aérotechnique, the advanced aeronautics school in Poitiers, France, Lapeyronnie joined Esterline's engineering and manufacturing facility in Bourges to participate in implementing computational fluid dynamics in sensor design. He worked on development of the deiced sensor product line—specifically, on Total Air Temperature probes—and succeeded in increasing capabilities in crystal conditions by at least 50% compared to standards, resulting in several patented innovations.

In 2005, at age 29, Lapeyronnie was made manager of the pressure and massflow design office in Bourges. In that role, he increased product robustness, improved measurement performance, decreased recurring costs and grew market share. These successes led to his promotion last year to manage the engineering department at this facility. Lapeyronnie is author of three patents for deiced temperature sensors and ice-detection systems for aircraft. In June, he was selected to participate in Esterline's annual leader forum, reserved for emerging executives within the company.



Timothy Lyon

Managing Director of Domestic Pricing, US Airways, Age 33

When Timothy Lyon was promoted to director of domestic pricing in October 2008, he became one of the youngest directors at US Airways—just 29 years old. In one of the most difficult revenue environments, Lyon leads all domestic pricing strategy, maximizing revenue through the best combination of prices and rules in a constantly changing competitive and economic environment.

During two difficult financial periods for America West and US Airways (the post-9/11 era and the 2008 fuel-price spike), Lyon was part of the team leading the carrier back to financial health—and to record revenue and profit performances over the past two years. His many additional accomplishments include managing US Airways' advantage fare program, worth an estimated \$150 million annually.



Puneet Kaura

Executive Director, Samtel Avionics & Defense Systems Ltd., Age 34

At 34, Kaura leads one of India's leading avionics houses, Samtel Avionics & Defense Systems. Under his leadership, the company has played a key role bringing mission-critical products and technology capabilities to India, helping the subcontinent's defense industry become self-reliant in manufacturing avionics—and making India a player in the global avionics business.

One of Kaura's most significant moves was driving Samtel's joint venture with India's leading aircraft maker, Hindustan Aeronautics Ltd. He also played a crucial role in forming a joint venture with Thales Aerospace for helmet-mounted sight and display systems, infrared search-and-tracking and other modern avionics systems for domestic and export defense markets. Kaura aims to make Samtel a globally competitive avionics business.



Joachim Mirabaud

Head of Flight Hour Services Engineering & Pool Management, Airbus, Age 33

Hired in 2009 to develop the A350 maintenance program, Joachim Mirabaud performed so well he quickly was named head of Flight Hour Services (FHS) engineering and pool management, responsible for all Airbus programs. He built the FHS team from scratch, growing it in the past three years to 11 people. At the same time, he oversaw procurement of more than 3,000 spare parts worth more than \$150 million during the past 18 months and set up the processes and the tools to manage those assets.

On the revenue side, the technical support by Mirabaud's group to the FHS sales team contributed significantly to the addition of new contracts totaling more than \$1 billion



over the past two years.

After nearly four years spent creating, building, developing and fine-tuning his operation, Mirabaud says his main objective is to reach a point where things are running smoothly, then look for

a position within Airbus where he can build another program. "I know I am made to lead and push a team to create new things," he says.

Darren Moe

Director of Software & Algorithms, General Atomics Aeronautical Systems, Age 34

In 2000, following college graduation, Darren Moe joined General Atomics Aeronautical Systems, leading development of and sales for the company's CLAW integrated payload control and analysis software. CLAW was designed for only basic control of the Lynx radar. Moe grew it into a major product line that interfaces more than 50 payloads across dozens of programs. Since then, CLAW has deployed across seven continents and dozens of defense, homeland security and export programs.

A 12-year string of similar successes has led Moe to his current position, where he manages a group of 140 and has become an authoritative voice on payload control and radar signal-processing capabilities. Those who have observed his career cite his ability to attract, retain and develop people. As evidence, they note that his staff has a remarkable 97% retention rate.

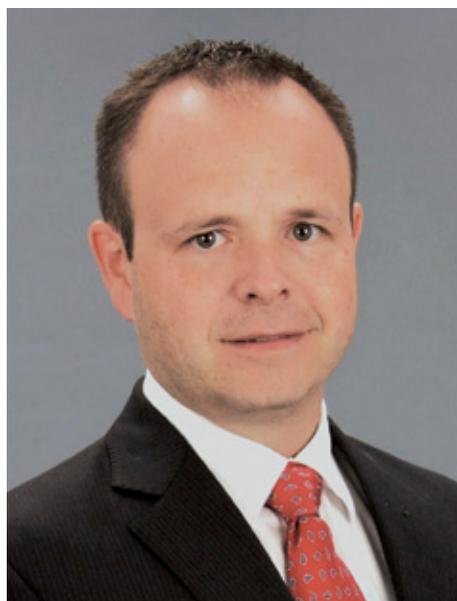


James T. Mooney

Precision Optics Chief Engineer, Exelis Geospatial Systems, Age 39

Daniel Adams, who nominated Mooney and is director of Exelis Geospatial Systems Precision Optics, calls Mooney "far and away the linchpin of Precision Optics' success." Mooney is highly regarded within the photonics and optics community. He earned a patent for work that emerged from his doctoral thesis. He recently received the Gold Ring of Quality Award for his work on High-Energy Laser Optical Components Process Development.

Mooney has led Exelis's precision optics team through multiple technical and strategic challenges. As a result, a soon-to-be-formed Exelis technology development and implementation group will report to him. The group's charter: raise the bar on Precision Optics' readiness toward becoming a leading manufacturer of mid-/large-sized optical components and sub-assemblies. Ultimately, insiders are betting the group's work will enable the company to play a leading role in the many emerging optical component markets.



Mike Moser

Chief Functional Engineer, AE 3007 Engines, Rolls-Royce, Age 37

During his 13 years with Rolls-Royce, Moser has been active in fielding several AE 3007 derivatives including the A1E and A2 for the Embraer ERJ 145XR and Legacy 650, and most recently the C2 for the Cessna Citation X.

His experiences range from mechanical to functional, which enables him to create innovative and valuable solutions to complex problems. As a Rotatives Group design engineer, Moser's work led to the low-cycle fatigue life-extension of many critical parts on one of the company's gas turbine engines. He also was a member of the Business Process Management Black Belt team that dramatically improved the quality of the highest scrap rate part in the Indianapolis manufacturing facility. And in his current position, Moser spearheaded a project fielding improved operating temperature limits for one of the turbofan engines, a change that has made a notable improvement in engine reliability.



Carlye Prinz

First-Line Manager, Harpoon & Standoff Land Attack Missile-Expanded Response International Programs, Boeing, Age 36

Carlye Prinz is responsible not only for managing a team of six project engineers that executes contracts and assists new business opportunities for more than 30 international customers, she also is the country manager for Chile, Japan, South Korea and Israel. Prinz is responsible for project management, foreign military sales processes, industrial participation contracts and export management.

Debbie Rub, vice president and general manager of missiles and unmanned airborne systems, says Prinz receives "rave reviews from her managers regarding her outstanding leadership skills and relationships with her international customers." Rub cites Prinz's ability to clear the tricky roadblocks that can exist with international clients. "Carlye is a phenomenal first-line leader and continues to take on increasingly challenging leadership roles related to engineering and project management," she says.



Aireen Omar

CEO, AirAsia Berhad, Age: 38

Aireen Omar was appointed CEO of AirAsia Berhad in July 2012. Previously, she was the regional head of corporate finance, treasury and investor relations at the carrier. She joined AirAsia Berhad in January 2006 as director of corporate finance.

Omar began her career with Deutsche Bank Securities in New York. She moved back to Malaysia in 2001 to join Maybank Group where she originated, structured and executed debt securities. In 2003, she joined Bumiwerks Capital Management, where she executed asset securitization, structured finance and project finance securities, including the issue of Malaysia's first residential mortgage-backed securities.

Omar holds an economics degree from the London School of Economics and Political Science, and a master's degree in economics from New York University.





Joe Puthoff

Chief Project Engineer, Trent 1000-TEN, Rolls-Royce, Age 36

Though his experience spans only 13 years, Puthoff has excelled in diverse assignments at Rolls-Royce. After starting in a technical role, Puthoff has led engine programs through various phases in the product life cycle, including program launch, design and development, certification, production and field service.

One of his most notable

accomplishments was as a key leader of the team that delivered FAA type certification for the 250-C300/A1 engine that powers the Robinson R66 helicopter. The certification was achieved on time, in 24 months from program launch. As a result, Puthoff received two Rolls-Royce awards in 2008 for "outstanding planning and execution of

an engineering program, and superior team performance."

In his current role on the Trent 1000-TEN engine, Puthoff leads a team of 130 engineers in Indianapolis with a \$30 million annual budget. In his spare time, Puthoff earned an MBA in 2004, one semester ahead of schedule, while holding down his day job.



Justin Siegel

Vice President of Fleet Projects, Latam Airlines Group, Age 38

Siegel joined LAN Airlines in 2005, quickly caught the attention of senior managers and was given successively more challenging roles. One of those was leading the team that developed and defined the supply-chain process and requirements for migrating to LAN's new maintenance IT system, Maintenix. He also directed the first Boeing 767 winglet installations as well as closed the program of reconfiguring LAN's long-haul fleet.

His successes led to his recent promotion to vice president of fleet projects at Latam. The group is directing 30 projects, including cabin modifications, systems and winglet installations, and eventual entry into service of the A350, among other aircraft types. Siegel aims to ensure the A350 project's success by leveraging his experience leading the team responsible for the recent incorporation of the Boeing 787 into LAN's fleet.

Jonathan Rambeau

Vice President of F-35 International Programs, Lockheed Martin Aeronautics, Age 39

Rambeau's direct boss calls him "an inspired business manager whose unique combination of skills and experiences make him an effective leader, business strategist and technologist."

Rambeau has developed and executed programs that require deep understanding of international customer requirements and formulated products and business strategies that fulfill their defense and economic needs. At the same time, he is adept at manag-



ing programs and has built a portfolio of international sources selected and cultivated to supply components that meet the challenging quantity, quality and cost elements of his programs. Most recently, Rambeau established a final assembly and checkout facility in Italy, which has begun assembling its first full wing and was awarded a development contract to integrate unique command, control, communications and computer intelligence, surveillance and reconnaissance (C4ISR) capabilities into Israel's F-35s.

Marc Szepan

Doctoral Candidate, University of Oxford, Age 39

At age 28, Szepan set up and led Lufthansa Technik's heavy maintenance business in the Philippines. He established a track record as a transformational leader committed to industry service and dedicated to lifelong learning. The operation quickly delivered standard-setting turnaround times and quality levels. He built a bench of talented Filipino staff,

many of whom have since achieved significant leadership roles.

At 32, Szepan was promoted to senior vice president at Lufthansa Systems, the IT services business segment of Lufthansa Group. In this role, he was responsible for restructuring and returning to a stable flight level a global flight-planning software, aircraft performance engineering, navigational data, and electronic flight bag business with subsidiaries in Germany, Poland, Switzerland and the U.S. A proponent of lifelong education, Szepan sent an unprecedented number



of members of his leadership team at Lufthansa Systems to executive MBA and comparable degree programs and to executive education courses at leading business schools.

Currently on sabbatical at Oxford, Szepan plans to return to a leadership role in aerospace. He sets ambitious goals, hoping to contribute to resolving industry challenges such as maintenance safety in the face of growing traffic and reconciliation of industry growth and environmental sustainability.

Nora Tgavalekos

Senior Manager for Technical Competency Definition and Development, Engineering, Technology and Mission Assurance, Raytheon, Age 34

Tgavalekos is responsible for assessing and improving the technical competencies across Raytheon's engineering, technology and mission-assurance workforce. The role emerged partly due to her gift for developing others: She is a frequent mentor to young Raytheon professionals and interns, and she is often asked by her alma mater, Boston University, to speak with undergraduates about the soft skills it takes to become a successful engineer. She also has been responsible for advising engineers about their career paths and performance development—including engineers senior to her.

Tgavalekos was previously the flight-test director for the Sea-based Radar. Insiders say she achieves results by consistently challenging her team of engineers to provide greater efficiencies while maintaining overall system excellence. That led to her 2010 Raytheon Excellence in Engineering and Technology Award.

In addition to her leadership and development skills, Tgavalekos is a gifted engineer who holds patents in radar discrimination from her projects at Raytheon and in medical devices from work at General Electric before joining Raytheon. She has written more than 30 papers and abstracts on the topics of missile defense and medical devices. One paper she co-authored is challenging the way scientists and doctors treat airway constriction and could lead to advances in the treatment of asthma.



Kevin Schoonover

Director of Strategy & Business Development-Missile Defense, Alliant Techsystems, Age 28

Not yet 30 and already at the director level, Schoonover has demonstrated a talent for both engineering and business. He is responsible for the growth of the Alliant Techsystems business line that is developing and producing solid rocket motors and control systems used in the U.S.'s ballistic missile defense system and the targets used to validate the system's performance.

Schoonover volunteers with several organizations, including the Manitou Experience, a week-long sports summer camp for boys who have experienced a significant death-loss; Reviving Baseball in the Inner City, an organization aimed at getting inner city teens off the streets; and the University of Maryland Clark School of Engineering Alumni Board, on which he is chairman of student outreach.





Leslie Thng

CEO, SilkAir, Age 37

Appointed CEO of SilkAir just last month, Leslie Thng is already overseeing a new brand campaign for the airline. A fast starter, Thng made an impressive mark in aviation while still in his mid-30s. He joined SilkAir, the regional wing of Singapore Airlines (SIA), as a board director in April while serving as SIA vice president for network planning. Prior to that, Thng was based in Frankfurt as general manager for Germany, beginning in June 2009 at age 34. Thng is an old hand at Singapore—over more than 13 years, he has worked at positions in China and Italy as well as in SIA's loyalty marketing and network revenue management departments.



Derk-Jan van Heerden

Managing Director, Aircraft End-of-Life Solutions, Age 33

Heerden's experience in aviation has been almost exclusively around end-of-life aircraft. He graduated with a degree in this area from Delft University of Technology in the Netherlands, where he was named best graduate by the Dutch Royal Aeronautical Society. After a brief period with KLM Engineering & Maintenance, he launched Aircraft End-of-Life Solutions (AELS), at age 26.

Today, van Heerden and his team are assisting aircraft owners all over the world with their end-of-life decisions on all aircraft types. In addition to disassembly and dismantling services, AELS now offers logistics, marketing and sales to reintroduce parts—services that are helping fuel AELS's steady growth. In 2010, AELS was accredited by the Aircraft Fleet Recycling Association (AFRA), which is dedicated to pursuing and promoting environmental best practices. An active voice on environmental issues, van Heerden was named to AFRA's board of directors in July 2010.



Jennifer Wong

Program Manager, Colony II Bus, Boeing Phantom Works
Advanced Space and Intelligence Systems
Age 34

Described by Boeing leadership as a "dynamic, innovative young professional," Wong is responsible for cost, schedule and technical execution of 20 small 3U nano satellites to support cost-effective access to space for multiple customers and payloads. So far, she has delivered 10 space-qualified nanosats, with the rest scheduled to be delivered by the end of 2012.

Earlier in her Boeing career, Wong worked in the Future Combat Systems program, where she led a team through major program milestones with high visibility. In the Phantom Eye program, she led development of business operations prototyping processes that enabled significant reduction in cost and schedule associated with the design, development and flight of a new family of high-altitude, long-endurance aircraft. She also led the Phantom Ray Systems Engineering Integration & Test (SEIT) team to a successful first flight, in a highly compressed schedule and cost-constrained environment.

Boeing has recognized Wong with several prestigious awards, including a Female/Minority Science, Technology, Engineering and Mathematics award and a company-wide communications award. She has also won two awards for leadership and service from the University of California at Irvine, where she obtained an MBA with an emphasis in strategy.

Al Wood

Executive Vice President,
Commercial Products & Services, AeroTurbine, Age 37

After 11 years in the U.S. Air Force, Wood joined the commercial aftermarket with AAR Corp., where he held sales and product-line positions. In 2006, he joined AeroTurbine as director of engine products; a year later, he was promoted to vice president of airframe and

engine materials. Wood's leadership proved crucial to AeroTurbine's growth into new product lines and development of new customer accounts as the company reinvented itself into a world-class supply-chain business that was acquired by International Lease Fi-

nance Corp. in 2011.

In his current role, to which he was promoted in 2011, Wood oversees the parts businesses, leasing and trading businesses. He also has been instrumental in the company's entry into two new business segments, defense and OEM services.



Gediminas Ziemelis

Chairman of the Board, Avia Solutions Group, Age 35

Under the leadership of Gediminas Ziemelis, Avia Solutions Group (ASG) has become the largest aviation group in Eastern Europe. Ziemelis conceived of an organization providing aircraft technical support and crew training services for Western-built aircraft that matched Western quality standards at Eastern European prices. Today, ASG employs more than 1,300 people in 40 locations worldwide.

Among the group's recent achievements: Small Planet Airlines secured

Italian and Polish carrier certification; Baltic Aviation Academy started a long-term cooperation agreement with CAE Inc. and a 50/50 joint venture with an Indian aviation group; and start-ups AviationCV.com (personnel resourcing) and Locatory.com (online spare parts supply) started generating revenue. Ziemelis also led ASG to inclusion on the Warsaw Stock Exchange and received the Golden Chariot award for outstanding performance in international transport in Russia.



Juan Carlos Zuazua

CEO, VivaAerobus,
Age 33

Zuazua joined VivaAerobus, Mexico's low-cost carrier, in 2006, rising rapidly through the ranks to become chief operating officer, then CEO in early 2010. As COO, he integrated the airline's sales system with the reservation system of its parent bus company, enabling the organization to migrate bus travelers to air transport. The program continues to flourish, accounting for more than 20% of the airline's total sales today.

Since taking the helm, Zuazua has overseen a 150% increase in the carrier's fleet size, entry into the Mexico City market and consistent delivery of increases in both profits and market share. He also has focused heavily on investing in innovation with ancillary revenue, positioning VivaAerobus among the top low-cost carriers in the world for ancillary revenue. Today, VivaAerobus operates 18 Boeing 737-300s on 50 routes. Zuazua, who says he strives to be "a true servant leader," eventually plans a fleet change to further reduce costs—a key element in all his decision-making.

