Annual Report

2016/2017

The American Society of Mechanical Engineers®
ASME®

ASME
SETTING THE STANDARD

| ASME INDIVIDUAL MEMBERS |

130,000

| ASME AROUND THE WORLD |

150
COUNTRIES

| ASME STANDARDS |

500

ASME ANNUAL REPORT
2016/2017

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The American Society of Mechanical Engineers

Our Mission

ASME's mission is to serve diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life, and communicating the excitement of engineering.

Our Vision

ASME aims to be the essential resource for mechanical engineers and other technical professionals throughout the world for solutions **that benefit humankind.**

Our Values

In performing its mission, ASME adheres to these core values:

- Embrace integrity and ethical conduct
- Embrace diversity and respect the dignity and culture of all people
- Nurture and treasure the environment and our natural and man-made resources
- Facilitate the development, dissemination and application of engineering knowledge
- **Promote the benefits of continuing education and of** engineering education
- Respect and document engineering history while continually embracing change
- Promote the technical and societal contribution of engineers

Our Credo

Setting the Standard...

- In Engineering Excellence
- In Knowledge, Community and Advocacy
- **For the benefit of humanity**

Our commitment to “serving diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life, and communicating the excitement of engineering” remains steadfast.

From the President & Executive Director

ASME has reached a transformational inflection point as we build upon our strong engineering heritage and position the Society for continued success and impact well into the 21st century and beyond. Our commitment to "serving diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life, and communicating the excitement of engineering" remains steadfast.

ASME is undertaking this pivot by addressing key technology challenges and opportunities in the public interest, including manufacturing, pressure technology, bioengineering, clean energy and robotics. As part of this focus, we've developed new and enhanced programs. We're improving our communications and reinforcing our information technology and other supporting infrastructure. Having a high-performing Board of Governors is a central component of our efforts. This new strategic approach has led us to take a closer look at our organizational culture – who we are and who we want to be – while maintaining our strong sense of mission.

At the 2017 Member Assembly held in June, we outlined a set of 10-year, 3-year and 1-year goals and formulated an Integrated Operating Plan (IOP) that will be at the center of ASME's transformational efforts. The IOP will provide a roadmap in building the Society's capabilities and provide outstanding products and services for our members and constituents, which align with our strategic goals. A series of Presidential Task Forces has contributed to the new IOP, helping lead us to the next chapter of ASME's transformation. In the pages that follow, we will present further insight into the work of each task force, the Society's technology portfolio and strategic direction, and our expanding global impact.

ASME's volunteers and members remain at the very heart of the Society – providing meaningful leadership, knowledge and expertise as we strive to serve the engineering community, our partners, collaborators and others around the world. One prime example is the successful launch of the ASME E-Fests, which has provided a new and exciting platform to engage our Student and Early Career Sector — and to simply enjoy the creativity, fun and excitement of engineering. ASME is firmly committed to a vibrant and enduring engineering future, and our students and early career engineers are leading the way.

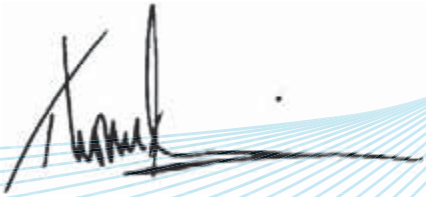
Our strategic vision to be recognized as a leader in advancing engineering technology requires that we raise our expectations and stay true to our mission to advance, disseminate and apply engineering knowledge to improve the quality of life.

There are endless opportunities for ASME to positively impact the engineering landscape while making the world a better place. From our world-renowned standards and certifications to our conferences, journals and learning and development offerings, ASME continues to strengthen its global partnerships, technical training and the visionary and inspiring work of the ASME Foundation. We are proving that engineering is indeed making a difference in the lives of millions.

Thank you for your support and contributions to ASME. This has been a truly exciting year thanks to the dedication of our leadership teams, volunteers and staff. Together we look to the future with boundless enthusiasm.

K. KEITH ROE, P.E.
PRESIDENT

THOMAS G. LOUGHLIN, CAE
EXECUTIVE DIRECTOR



2016/2017 ASME Board Of Governors

Front row left to right

1 Julio C. Guerrero, Ph.D.
ASME Immediate Past President (2015-2016)
Founder
Cambridge Research and Technology LLC

2 K. Keith Roe, P.E.
ASME President (2016-2017)
Chairman and President
Burns and Roe Group, Inc. (Retired)

3 Charla K. Wise
ASME President Elect (2017-2018)
Vice President Engineering
Lockheed Martin Aero (Retired)

Back row left to right

4 Mahantesh Hiremath, P.E., Ph.D.
Distinguished Engineer
Space Systems Loral (SSL)

5 William J. Wepfer, Ph.D.
Eugene C. Gwaltney, Jr., School Chair
George W. Woodruff School of
Mechanical Engineering
Georgia Institute of Technology

6 Caecilia Gotama, P.E.
Founder and Principal
PSPF Holdings, LLC

7 Bryan A. Erler, P.E.
President
Erler Engineering Ltd

8 Thomas G. Loughlin, CAE
Executive Director
ASME

9 James W. Coaker, P.E.
ASME Secretary/Treasurer
Principal
Coaker & Company

10 John E. Goossen
Vice President for Innovation and
Small Modular Reactor Development
Westinghouse Electric Company (Retired)

11 Karen J. Ohland
Associate Director for Finance and Operations
Princeton University Art Museum
Princeton University

12 Sriram Somasundaram, Ph.D.
Technical Lead
Battelle Pacific Northwest National Laboratory

13 John M. Tuohy, P.E.
Principal
J M Tuohy & Associates LLC

Not in photo:

Urmila Ghia, Ph.D.
Professor of Mechanical Engineering
University of Cincinnati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FY2017 – A Transformative Year

Fiscal Year 2017 has been a pivotal year in the history of ASME. Volunteers and staff have begun to implement vital changes to how our Society pursues its timeless mission of service to engineers and engineering.

Our vision is an ambitious one: ASME aims to be the essential resource for mechanical engineers and other technical professionals throughout the world for solutions that benefit humankind. This overarching vision demands that ASME raise its game in every area of endeavor, and we are making it happen right now. By 2025, we are confident that more mechanical engineers and other technical professionals, will turn to ASME – for education in critical areas of technology, for professional networking, and for unprecedented opportunities to participate in the advancement of technology and its applications.

The rapid integration of new technologies, processes and materials is testing the boundaries of traditional performance. To achieve our 2025 goals, ASME began by taking a careful look at what we are now and what we aim to become. ASME formed five Technology Advisory Panels (TAPs), one for each of the core technology areas: Manufacturing; Pressure Technology; Clean Energy; Bioengineering; and Robotics. Members of each TAP are thought-leaders from ASME's core constituencies: industry, academia, research and government. The TAPs' charge is to provide technology and market insights, identify constituent needs, recommend potential new ASME products and services, and promote increased constituent engagement.

ASME's ten-year goals include:

- ASME is an internationally-renowned thought leader and networking hub for engineering knowledge and information, best practices and events.
- ASME enables collaboration among industry, government and academia to advance the cause of engineering worldwide.
- ASME's engagement is open and seamless, empowering individuals worldwide to contribute, communicate and consume engineering content to solve technical problems.
- ASME is globally respected for its Standards and Certification programs and is recognized for enhancing public safety and improving the quality of life for humankind.
- ASME offers education, learning and development programs to prepare the workforce of tomorrow to address the world's challenges.
- ASME engages and inspires future generations to pursue careers in engineering.
- ASME's growing impact on the world is enabled by a well-managed and diversified revenue stream that provides sustainable financial health.

ASME's Strategic Actions remain:

- Leadership Position – Mobilize distinct assets (for example, the expertise of our community) to establish value as a technology innovation partner to executive leadership in various industries and markets.
- Technology Portfolio – Create and manage a well-balanced, sustainable technology portfolio along with associated industry- and geography-based strategies.
- Solutions Portfolio – Strengthen and expand solutions portfolio: defend Standards & Certification against agile competitors; solidify and diversify ASME's revenue base by developing solutions with strong customer demand; establish deeper expertise in content and technology development and deployment across the Technology Development Curve.
- Collaboration – Enhance ASME's impact in engineering by broadening collaboration with peers, creating greater scale and impact, reducing barriers to entry and expanding diversity and student engagement.
- Engagement – Increase global core constituent engagement by providing high-value, relevant, impactful and rewarding opportunities to network, participate, and learn through a branded set of technologies – and purpose – advancing activities delivered through a variety of platforms.

There are myriad opportunities for ASME to impact the engineering landscape while making the world a better place. From world-renowned **standards and certification programs to** educational initiatives at every level, from global partnerships to technical training opportunities to the initiatives of the ASME Foundation, ASME continues to demonstrate the vital importance of engineers and engineering to the lives of billions.

Following on the TAPs' recommendations, ASME's priorities will initially include both the addressing of key public technology challenges as well as the broadening of our technology base in five core industry areas: Manufacturing, Pressure Technology, Bioengineering, Clean Energy and Robotics.

Implementation of Strategic Technology-Based Focus

ASME began the implementation of its new technology-based strategic focus by creating roadmaps, collecting best practices, and developing content in each of the five strategic technology areas. Each ecosystem includes standards, conformity assessment, learning and development materials, community engagement and technical events. Each of the five strategic technology areas is affected by eight "cross-cutting" or enabling technologies important to innovation today: the Internet of Things (IoT); "big data" analytics; artificial intelligence; cybersecurity; sustainability; materials; nanotechnology; and design engineering.

Manufacturing

Manufacturing has entered its next wave of major development, one which will see dramatic improvements in productivity, risk management, design and production quality on a global scale. Manufacturing systems are getting "smarter" through digitalization, allowing engineers to achieve more even while consuming less energy, optimizing maintenance and reducing waste. Digital processing is introducing changes from design to end-use, with interconnections throughout supply chains, by means of advanced sensors, intelligent process controls, "big data" analytics and artificial intelligence. These unprecedented advances also accelerate product development cycles and promote the creation of bespoke customer-centric solutions. ASME serves all the major industry verticals affected by advanced manufacturing, including: aerospace and defense; automobiles and transport; industrial machinery; high-tech and electronics; consumer packaging; and utilities.

ASME will focus on the technologies associated both with traditional manufacturing (the classical processes of converting raw materials into finished products using mechanical or mechanized transformational techniques) and with advanced manufacturing (which overlays the innovative application of modern digital technologies, processes and methods to product design and production). Also notable in FY17 are ASME's new standards development activities related to modeling for additive manufacturing, including Y14.46 Product Definition for Additive Manufacturing, Y14.41.1 Model Organization Schema Practices, Y14.48 Universal Direction and Load Indicators and the new V&V-50 Subcommittee on Verification and Validation of Computational Modeling for Advanced Manufacturing.

Pressure Technology

Increases in the demand for power require technologies that can reduce emissions, raise efficiencies and lower fuel costs, and enable work at higher temperatures and pressures. Cleaner coal technologies are being implemented in advanced, ultra-supercritical power plants throughout the world. Increased use of natural gas in higher efficiency combined-cycle power plants, as well as increased cycling of these plants to better integrate variable renewable energy generation, have resulted in the need for Heat Recovery Steam Generators (HRSGs) able to withstand high-temperature cyclic loads. Applications for deep-sea oil exploration also require advanced High Pressure High Temperature (HPHT) components.

Pressure technology will be understood for organizational purposes to comprise all the technologies and market segments represented by the design, materials fabrication, inspection, commissioning, operation and maintenance of pressure equipment through its life cycle, including failure prevention. Key industry segments that rely on ASME pressure equipment include electric power generation as well as oil and gas.

In FY17, ASME's International Working Groups (IWGs) for pressure technology standards development were launched in China, Germany and Italy. ASME subject matter experts are evaluating potential incorporation of additive manufacturing processes into ASME standards for pressure equipment. ASME also formed a new standards committee, Boiler and Pressure Vessel Code (BPVC) Section XIII, to develop a completely novel and comprehensive code for pressure relief devices. ASME's Pressure Vessel and Piping (PVP) Conference continues to be a pre-eminent international forum for the fruitful exchange and development of ideas in those disciplines and technologies for the global practitioner community.

Clean Energy

While world opinion seems likely to continue toward a consensus on the benefits of reduced carbon emissions and increased proportions of renewables and other clean technologies to our global profile, there is little doubt that fossil fuels will still be a vital part of the world's sourcing mix for decades to come. Utility-scale battery and storage technologies have become the "holy grail" for unlocking the full potential of renewables as well as for grid stability, but we haven't quite perfected them yet. Nuclear power will surely play an important part as well. Regardless of the sources we employ, however, the innovations of digital engineering will provide the basis for increased efficiency and success in every one even as each evolves. Engineers will continue to lead the way toward increasingly clean, reliable, accessible energy for both electricity and heating, handling the challenges of balance and flexibility, and making systems work within constraints including water availability, extreme conditions, environmental impact, economics and the limits of materials.

Clean Energy will be understood, again for organizational purposes, to comprise technologies that generate electric power through means that significantly reduce or eliminate environmental emissions or impact. These include renewable energy sources such as solar, wind and hydroelectric; nuclear power; fuel cells and certain biomass sources; and energy storage technologies to capture electricity produced at one time of day for use at another, including battery technologies both traditional and novel. Clean energy also comprises technologies to reduce or eliminate air pollution from fossil-fuel power generation: low-carbon technologies; high-efficiency boilers; combustion turbines; and combined-cycle power plants. It also will include energy efficiency work, demand-side management, and distributed generation technologies to reduce or optimize energy usage and support sustainability.

FY17 saw the co-location of the ASME Power & Energy Conference & Exhibition, International Conference on Power Engineering (ICOPE) and ASME Turbomachinery Technical Conference & Exposition (Turbo Expo). ASME Power & Energy included the ASME Power Conference, the ASME Energy Sustainability Conference, the ASME Fuel Cell Conference, the ASME Nuclear Forum and the ASME Energy Storage Forum.

Bioengineering

Advances in materials and life sciences are having a profound impact on medicine and agriculture across the board. Advances in robotics, 3D printing and other innovations are improving healthcare outcomes and reducing costs. Bioengineering is a complex, growing interdisciplinary area grounded in regenerative medicine and therapeutic imaging, biomaterials and nanotechnology, biomechanics applied to biological processes and systems, bioinstrumentation and rehabilitation engineering. ASME is poised to support all aspects of its pursuit, including the "four pillars" of healthcare: medical devices, pharmaceuticals, biologics and cellular therapy. Cross-disciplinary bioengineering expertise is increasingly in demand for the development of novel technologies, processes, systems and products.

Bioengineering will initially include all applications of engineering processes to the development of pharmaceuticals, biologics, food supplements and preservatives, to the diagnosis, prevention and treatment of disease, and to food production, cosmetics production and ergonomics.

In May 2017, ASME launched a new multidisciplinary biomedical engineering association initiative: the Alliance of Advanced Biomedical Engineering (AABME.org). AABME was founded to provide a bridge to connect basic and applied research efforts and a platform by which to share the wealth of ASME's decades of work in bioengineering with the field as it reaches a new and vital level of maturity.

ASME first established itself as a leader in biomechanics and mecHanobiology in 1956 when it founded its Human Factors Division—the forerunner to today's ASME Bioengineering Division. AABME will continue that legacy of ASME technical excellence by offering a powerful set of solutions and resources to the biomedical engineering community to promote innovation, collaboration and growth. ASME's leadership in this space is also grounded in standards and certification activities including V&V 40 Verification and Validation in Computational Modeling of Medical Devices and ASME's Bioprocessing Equipment (BPE) standard and certification program.

AABME has deep roots in the biomedical and bioengineering **efforts of ASME members and** stakeholders over the last six decades. AABME will build on that legacy of technical achievement **by offering a powerful set of** solutions and resources to today's and tomorrow's biomedical engineering community to promote innovation, collaboration, and growth.

Robotics

The next generation of robotics will offer the world unprecedented decision-making support as well as enhanced imaging and visualization capabilities, among many other advances. Robots are acquiring the ever-greater dexterity and intelligence they will need in order to handle increasingly complex manufacturing and maintenance service tasks across a wide range of sectors including but not limited to energy, healthcare and transportation.

Breakthrough advances in artificial intelligence, machine learning and natural user-interfaces will continue to spur development. Industrial digital and cloud computing will continue to increase market opportunities. Industrial machine systems will continue to be programmed to perform increasingly complex tasks, respond to specific directives or operate autonomously within highly specific, even idiosyncratic, environments.

Under the robotics rubric, ASME will include all industrial machine systems that may be programmed to perform predefined tasks, respond to specific inputs or operate autonomously. These include traditional industrial machine systems that comprise three degrees or more of articulation as well as emerging areas including service robots; mobile unmanned systems (i.e., drones); and autonomous vehicles.

In FY17, ASME Boiler and Pressure Vessel Code (BPVC) Week meetings included a special panel session on unmanned aerial systems (UAS) for power plant inspection. ASME has also established a Special Working Group on the Use of UAS/UAVs for Power Plant Inspection. The working group is focused on developing standards for uses of UAS/UAVs for inspections in plants such as power plants, petrochemical plants and manufacturing facilities.

Global Relevance and Reach

The technologies described here represent part of the future of the discipline and profession of mechanical engineering. ASME's breadth and depth also include the rich technologies represented by its 36 Divisions and five Segments. To assure the Society's place as the global leader for advancing technology throughout the world of engineering, we must embrace and serve them in all their broad and varied applications. Such efforts will naturally increase our global relevance, reach and engagement with members and constituents throughout industries including aerospace, agriculture, automotive, healthcare, defense, energy and beyond, as well as in the domains of academia, government, industry, undergraduate and graduate students, and technology development professionals. ASME's volunteers and staff around the world are dedicated to making it happen. They are hard at work raising the Society's game in every area, optimizing and harmonizing Society efforts with the requirements of today's and tomorrow's engineering community. Thus ASME continues to set the standard as we heed the call to global technology leadership.

ASME STRATEGY

Mission

ASME's mission is to serve diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life; and communicating the excitement of engineering.

Vision

ASME aims to be the essential resource for mechanical engineers and other technical professionals throughout the world for solutions that benefit humankind.

Credo

Setting the Standard…

- In Engineering Excellence
- In Knowledge, Community & Advocacy
- For the benefit of humanity

Core Values

In performing its mission, ASME adheres to these core values:

- Embrace integrity and ethical conduct
- Embrace diversity and respect the dignity and culture of all people
- Nurture and treasure the environment and our natural and man-made resources
- Facilitate the development, dissemination and application of engineering knowledge
- Promote the benefits of continuing education and of engineering education
- Respect and document engineering history while continually embracing change
- Promote the technical and societal contribution of engineers

Enterprise Strategic Objectives

By 2025, ASME will:

- Be relevant and impactful to global constituents by being the **recognized leader** in advancing engineering technology.
- Be the **go-to organization** to help address key technology-related challenges in the public interest in a manner that engages core engineering constituencies (government, academia, industry, engineers, students, and technology development professionals).
- Have a **unified organizational structure** and culture that encourages and empowers members and other interested individuals to find their lifelong professional home where they can impact the world, contribute content, share ideas, participate in communities, and work on projects that improve the human condition.

10 Year Society Goals

- ASME is an internationally-renowned **thought leader and networking hub** for engineering knowledge and information, best practices, and events.
- ASME enables **collaboration** among industry, government, and academia to advance the cause of engineering worldwide.
- ASME's **engagement is open and seamless,** empowering individuals worldwide to contribute, communicate, and consume engineering content to solve technical problems.
- ASME is **globally respected** for its Standards and Certification programs and is recognized for enhancing public safety and improving quality of life for humankind.
- ASME offers education and training programs to **prepare the workforce of tomorrow** to address the world's challenges.
- ASME **engages and inspires future generations** to pursue careers in engineering.
- ASME's growing impact on the world is enabled by a **well-managed and diversified revenue stream** that provides sustainable financial health.

Approved by ASME Board of Governors on June 14, 2017 – Version 7.21.17

Strategic Action

Leadership Position

Mobilize distinct, under-leveraged assets (for example, the expertise of our community) to establish value as a technology innovation partner to executive leadership.

Technology Portfolio

Create and manage a well-balanced, sustainable technology portfolio along with associated industry- and geography-based strategies.

Solutions Portfolio

Strengthen and expand solutions portfolio: defend Standards & Certification against agile competitors; solidify and diversify ASME's revenue base by developing solutions with strong customer demand; establish deeper expertise in content and technology development and deployment across the Technology Development Curve.

Collaboration

Enhance ASME's impact in the mechanical engineering field by broadening collaboration with peers, creating greater scale and impact, reducing barriers to entry, and expanding diversity and student engagement.

Engagement

Increase core constituent engagement around the world by providing high-value, relevant, impactful, and rewarding opportunities to network, participate, and learn through a branded set of technology- and purpose-advancing activities delivered through a variety of platforms.

The strategy is initially focused on five core technologies and eight enabling applications and cross-cutting technologies listed below:

The following five core technologies have been identified as key to the overall strategy. Each technology has a Technology Advisory Panel ("TAP") of experts in their field and their role is to identify the needs of the market in that technology area. A detailed definition of each of the five core technologies is part of the terms of reference for each applicable TAP.

Manufacturing

The technologies associated with traditional and advanced manufacturing. Traditional manufacturing is considered to be the processes of converting raw materials into finished products using mechanical or mechanized transformational techniques whereas advanced manufacturing is considered to be the innovative application of technologies, processes and methods to product design and production.

Pressure Technology

Pressure technology comprises those technologies and market spaces representing the design, materials, fabrication, inspection, commissioning, operation, and maintenance of pressure equipment including through life expectancy and failure prevention.

Clean Energy

Clean Energy comprises those technologies for energy generation and usage while minimizing the impact on the environment, including the production of electricity and heating through renewable energy systems, such as solar, wind, biomass, and energy-from-waste, related energy storage and distributed generation technologies, nuclear power generation, energy efficiency, and certain areas of emissions control.

Bioengineering

The technologies associated with the application of engineering processes to developing products, pharmaceuticals, biologics, food supplements and preservatives covering diagnosis, prevention and treatment of disease, food production, cosmetics production and ergonomics.

Robotics

Industrial machine systems that can be programmed to perform predefined tasks, respond to specific inputs or programmed to operate autonomously within a specified environment. Robotics includes traditional industrial machine systems that typically have three degrees or more of articulation as well as emerging areas such as service robots, drones and autonomous vehicles which share the core technologies.

Eight Enabling Applications and Cross-Cutting Technologies

- Internet of things (IoT)
- Big data analytics
- Artificial intelligence
- Cybersecurity
- Sustainability
- Materials
- Nanotechnology
- Design engineering

Approved by ASME Board of Governors on June 14, 2017 – Version 7.21.17

New ASME E-Fests Emphasize the Fun and Excitement of Engineering

As part of its continuous effort to support and inspire the next generation of engineers, ASME launched a new program in the spring of 2017 — E-Fests (Engineering Festivals) — a series of regional three-day, two-night events for engineering students. E-Fests combine creative learning opportunities revolving around ASME competitions, hands-on workshops, career and professional development sessions, keynote and lightning talks, social activities and lots of fun.

More than 2,000 participants attended the inaugural series of three E-Fests, which took the place of the ASME regional student conferences that were previously held each spring throughout ASME's various districts.

Over 1,000 attendees from across India gathered in early March at the LNM Institute of Information Technology's **campus in Jaipur for the first festival, E-Fest Asia Pacific. The following two E-Fests took place in the United States.** E-Fest West, which drew a crowd of more than 500 attendees from nearly 50 universities, was held in mid-March at **the University of Nevada, Las Vegas. E-Fest East, held at Tennessee Technological University in Cookeville, Tenn., in April, brought together over 800 attendees from more than 80 colleges and universities in the United States** as well as Canada, Colombia, Egypt, India, Mexico, Pakistan and Taiwan.

The lively and immersive student festivals incorporated a variety of unique hands-on activities, including **hackathons, technology and innovation lightning talks, career-briefing sessions, mentoring opportunities,** leadership and professional development workshops and round-table networking sessions.

ASME E-Fests™

Brought to you by ASME Engineering Festivals™.

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2016\2017 ASME Year in Review

July 2016

An ASME Congressional briefing, "Advanced Manufacturing Communities: Encouraging Innovation and Building the Advanced Manufacturing Economy of the Future," drew more than 100 members of Congress, congressional staff, agency officials, and thought leaders. Participants at the briefing on July 14 included ASME Past President Bob Sims, IBM Fellow Emeritus Nicholas Donofrio, Nam Suh of MIT and Tom Kurfess, former assistant director for Advanced Manufacturing at the White House Office of Science and Technology Policy.

August 2016

The Worthington Direct-Acting Simplex Steam Pumps, which powered the famous ironclad Civil War vessel the USS Monitor, were recognized by ASME for their role in revolutionizing the U.S. Navy's fleet. The devices, which are the earliest known surviving direct-acting steam pumps, were designated as an ASME Historic Mechanical Engineering Landmark in a ceremony held on August 25 at the Mariners' Museum and Park in Newport News, Virginia. The simplex steam pumps were invented by Henry R. Worthington, one of ASME's founding members.

September 2016

ASME marked the 100-year anniversary of the ASME B30 Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks and Slings during proceedings of B30 Committee meeting held September 18-22 in Clearwater, Florida. ASME continues to maintain and advance safety standards for the crane industry and has expanded the initial Code to meet a wide variety of industry needs.

January 2017

ASME Past President and Fellow Bob Sims was elected to the board of directors of the American Association of Engineering Societies (AAES), a multidisciplinary organization of engineering societies dedicated to advancing the engineering profession's impact on the public good. Sims, who began his three-year term as a board member on January 1, served as ASME's 133rd president from 2014-2015. He is currently a senior engineering fellow at Becht Engineering Co.

February 2017

Members of the Turkish Standards Institution, the national standards organization of Turkey, completed a memorandum of understanding with ASME. The meeting on February 14, between Sebahittin Korkmaz, president of TSE, and ASME Executive Director Thomas Loughlin featured the signing of an agreement that would expand ASME and ASME Standards & Certification's impact in Turkey, promote related products and services, and potential opportunities for cooperation in training, conferences and workshops.

March 2017

Hundreds of student engineers from across India gathered in the city of Jaipur to compete, to learn from accomplished professionals, to network with both peers and industry representatives and to party at ASME's inaugural E-Fest (Engineering Festivals) held March 3-5. E-Fest Asia Pacific was the first in a series of 2017 E-Fest events, which were also held at the University of Nevada and at Tennessee Tech University. The three-day, two-night events enabled engineering students to expand their knowledge, test and showcase new skills and broaden their social and professional networks.

October 2016

On October 17, a delegation from the China Chemical Industry Equipment Association (CCIEA) met with ASME in New York to sign a memorandum of understanding that formalized the relationship the groups have maintained for nearly 10 years. ASME Executive Director Thomas Loughlin and CCIEA's Director General Zhao Min officiated over the agreement, which covers the promotion of information exchange, cooperation in standards development and training, standards committee participation, and potential cooperation in workshops and seminars with a special focus on conformity assessment and personnel certification.

November 2016

David Sandalow, the inaugural fellow at Columbia University's Center on Global Energy Policy, delivered the keynote address at ASME's 2016 International Mechanical Engineering Congress and Exposition (IMECE) on November 14 in Phoenix, Arizona. In his presentation titled "Energy Policy and Technology: Seven Trends to Watch," Sandalow, a noted energy and climate policy authority, shared his thoughts on the key technology- and energy-related trends he believes will have major implications on the United States — and society in general — for the foreseeable future.

December 2016

ASME Government Relations hosted a Congressional Briefing on advanced robotic technologies and their impact on manufacturing. The briefing, titled "Advanced Robotics in Manufacturing: Enabling New Technology and Increased Opportunity," was held December 13 at the Senate Hart Office Building in Washington, D.C. Introductions and opening remarks for the briefing were given by ASME President Keith Roe (left) and U.S. Senator Chris Coons (D-DE). Panelists suggested that Congress could help advance robotics by implementing policies that help accelerate the robotics ecosystem in the United States so that U.S. manufacturing can be more competitive in the global market.

April 2017

On April 25, ASME led the 14th annual Engineering Public Policy Symposium entitled, "Federal Investments in Engineering and Science to Spur Innovation and Competitiveness." The Symposium convened 150 presidents, presidents-elect and executive directors from 44 engineering societies, representing more than two million engineers. Following the Symposium, leaders from ASME's Technical Divisions, the Committee on Government Relations, the ECLIPSE Interns and the Industry Advisory Board participated in 60 congressional visits with Members of Congress and their staff to discuss manufacturing, energy and research and development policy-related issues, as well as to offer their services as a technical resource. The Symposium was made possible by a grant provided by the United Engineering Foundation and the Founder Societies, which includes ASME, AIChE, AIME, ASCE, and IEEE-USA.

May 2017

ASME INSPIRE completed the 2017 academic year with partaicipation from more than 1,000 middle and high schools across 47 states and the District of Columbia, including more than 1,000 teachers and nearly 48,000 students. On May 17, the Joseph A. Cavallaro Middle School in Brooklyn, N.Y. marked the third year of using INSPIRE in its curriculum. Sixty-three of the school's sixth-grade students were recognized for successfully completing all 16 missions of the INSPIRE online program. Over the course of three years, ASME INSPIRE has reached more than 100,000 students across the United States.

June 2017

Charla K. Wise was introduced as the 136th president of ASME during the Society's 2017 Annual Meeting held in California. Wise is a consultant and has served as an adjunct professor of aerospace engineering at the University of Michigan. She had spent more than 25 years in high-profile, leadership positions at General Dynamics and Lockheed Martin, and has been an active and dedicated supporter of the Society throughout her years of involvement with ASME.

Financials

Financial Table of Contents

"There's nothing I believe in more strongly than getting young people interested in science and engineering, for a better tomorrow, for all humankind."

Bill Nye
Science Communicator, Educator and Mechanical Engineer

Treasurer's Report ASME

I am pleased to present the fiscal year 2017 audited financial reports of ASME. The Society continues to invest in an enterprise strategy designed to maximize ASME's impact, future relevance and growth.

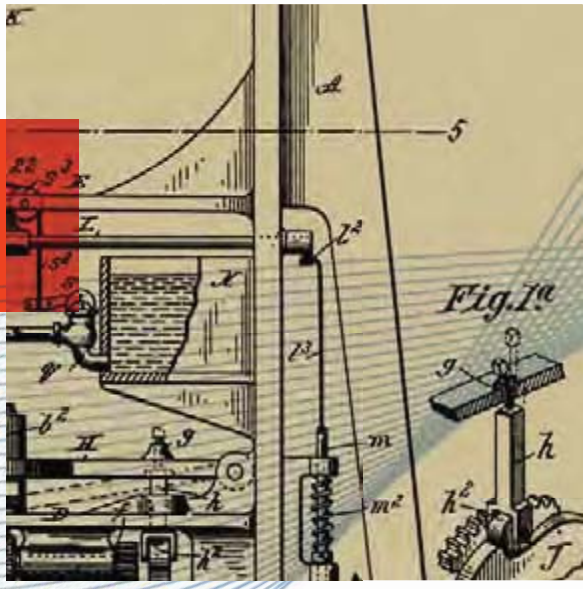
ASME revenues from operations were $109.5 million for the fiscal year in light of external factors such as weakness in the Oil & Gas and Nuclear Industries and the cyclicality of conferences, offset by direct product cost savings, thus resulting in an operating deficit of $4.8 million. Favorable market conditions allowed our investment portfolio to rebound by $12.9 million. There was also a favorable adjustment of $1.8 million related to pension and post-retirement plans other than periodic costs recorded in non-operating activities. As a result, there was an aggregate increase in net assets of $9.8 million. The portion affecting the ASME General Fund was $10.7 million.

ASME's Statements of Financial Position presents total assets of $173.0 million as of June 30, 2017. This reflects a 3.8% decrease from 2016 while total liabilities decreased 18.4% over the same period. The decrease in assets is attributed to the depreciation of long-term fixed assets, coupled with reduced receivables as we close out the boiler code cycle. The decrease in liabilities included lower accrued employee benefits resulting from continued contributions to the pension plan. Overall, ASME's net assets ended at $98.8 million, 11.1% higher than 2016.

ASME received an unmodified, or clean, opinion from KPMG LLP in the Independent Auditors' Report. ASME is tax exempt under Section 501 (c) (3) of the Internal Revenue Code.

I submit these reports confident that ASME continues to be a financially sound and strong organization.

JAMES W. COAKER
ASME TREASURER, FY17



INDEPENDENT AUDITORS' REPORT

The Board of Governors
The American Society of Mechanical Engineers:

We have audited the accompanying consolidated financial statements of The American Society of Mechanical Engineers D/B/A ASME (the Society), which comprise the consolidated statements of financial position as of June 30, 2017 and 2016, and the related consolidated statements of activities and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Society as of June 30, 2017 and 2016, and the changes in its net assets and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

KPMG LLP

September 18, 2017

KPMG LLP is a Delaware limited liabilty partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss Entity.

Consolidated Statements of Financial Position

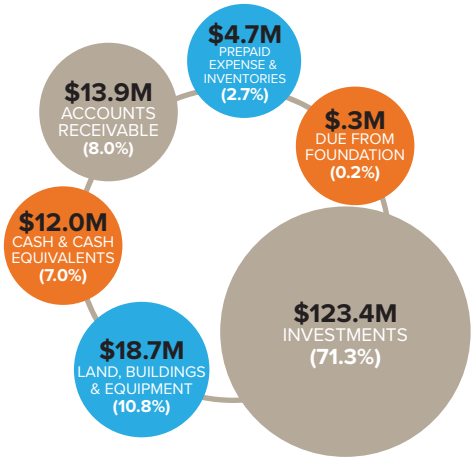
JUNE 30, 2017 AND 2016

ASSETS	GENERAL	DESIGNATED & RESTRICTED	CONSOLIDATING ADJUSTMENTS	2017 TOTAL	2016 TOTAL
Cash and cash equivalents (note 13)	$ 7,055,923	4,972,946	—	12,028,869	10,455,723
Accounts receivable, less allowance for doubtful accounts of $278,000 in 2017 and 2016 (note 13)	19,361,754	2,821,906	(8,297,365)	13,886,295	16,781,016
Due from The ASME Foundation, Inc. (note 3)	279,289	—	—	279,289	367,767
Inventories	539,608	—	—	539,608	553,202
Prepaid expenses, deferred charges and deposits	4,069,214	62,261	—	4,131,475	3,099,233
Investments (note 4)	97,809,303	25,582,869	—	123,392,172	125,127,607
Property, furniture, equipment and leasehold improvements, net (note 5)	18,426,577	318,753	—	18,745,330	23,479,450
Total assets	$ 147,541,668	33,758,735	(8,297,365)	173,003,038	179,863,998
LIABILITIES AND NET ASSETS					
Liabilities:					
Accounts payable and accrued expenses	$ 6,068,602	11,346,110	(8,197,365)	9,217,347	9,966,341
Accrued employee benefits (notes 7 and 8)	29,331,599	—	—	29,331,599	35,180,724
Deferred publications revenue	470,043	—	—	470,043	10,078,218
Deferred dues revenue	2,770,615	—	—	2,770,615	3,055,753
Accreditation and other deferred revenue	21,175,880	45,641	—	21,221,521	20,924,368
Deferred rent (note 11)	11,181,078	—	—	11,181,078	11,683,376
Total liabilities	70,997,817	11,391,751	(8,197,365)	74,192,203	90,888,780
Commitments (notes 5, 11 and 12)					
Net assets:					
Unrestricted	76,543,851	21,863,606	(100,000)	98,307,457	88,485,717
Temporarily restricted (notes 9 and 10)	—	366,811	—	366,811	352,934
Permanently restricted (notes 9 and 10)	—	136,567	—	136,567	136,567
Total net assets	76,543,851	22,366,984	(100,000)	98,810,835	88,975,218
Total liabilities and net assets	$ 147,541,668	33,758,735	(8,297,365)	173,003,038	179,863,998

See accompanying notes to consolidated financial statements.

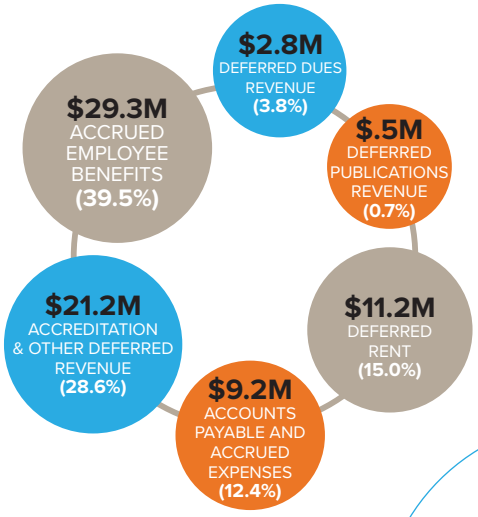
Total Assets of $173.0 Million

(ASME Statement of Financial Position June 30, 2017)



Total Liabilities of $74.2 Million

(ASME Statement of Financial Position June 30, 2017)



ASME

Consolidated Statements of Activities

YEARS ENDED JUNE 30, 2017 AND 2016

	GENERAL	DESIGNATED AND RESTRICTED (NOTES 9 AND 10)	CONSOLIDATING ADJUSTMENTS	2017 TOTAL	2016 TOTAL
Operating revenue (note 6):					
Membership dues, publications, accreditation, conference fees and other revenue by sector/operating unit:					
Codes and standards	$ 34,982,276	856,676	(823,140)	35,015,812	39,226,471
Conformity assessment	32,521,461	100,000	(100,000)	32,521,461	31,193,643
Learning and development	5,306,029	—	—	5,306,029	6,117,564
Programs	634,052	793,677	(479,897)	947,832	574,072
Technical events and content and institutes	11,561,171	58,100	—	11,619,271	14,091,894
Publications	12,186,730	—	—	12,186,730	13,047,319
Technology advancement and business development	135,085	—	—	135,085	191,316
Constituent engagement	10,927,491	508,387	(12,175)	11,423,703	11,069,513
Miscellaneous revenue	299,731	292,778	(292,778)	299,731	1,650,747
Total operating revenue	108,554,026	2,609,618	(1,707,990)	109,455,654	117,162,539
Operating expenses:					
Program services by sector/operating unit:					
Codes and standards	16,914,926	950,738	(573,831)	17,291,833	20,273,268
Conformity assessment	18,452,070	138,834	(249,309)	18,341,595	19,117,102
Learning and development	6,430,398	—	—	6,430,398	7,165,002
Programs	5,577,489	974,789	(479,897)	6,072,381	6,411,204
Technical events and content and institutes	15,517,095	1,356,151	—	16,873,246	19,160,142
Publications	11,747,136	—	—	11,747,136	11,399,385
Technology advancement and business development	4,454,854	—	—	4,454,854	3,384,192
Constituent engagement	3,186,762	1,843,035	(12,175)	5,017,622	5,257,329
Total program services	82,280,730	5,263,547	(1,315,212)	86,229,065	92,167,624
Supporting services:					
Board of governors and committees	793,708	41,665	—	835,373	1,370,020
Marketing	5,176,589	252,350	(292,778)	5,136,161	4,915,493
General administration	22,032,807	—	—	22,032,807	20,331,608
Total supporting services	28,003,104	294,015	(292,778)	28,004,341	26,617,121
Total operating expenses	110,283,834	5,557,562	(1,607,990)	114,233,406	118,784,744
Deficit of operating revenue over expenses	(1,729,808)	(2,947,944)	(100,000)	(4,777,752)	(1,622,205)
Nonoperating activities:					
Interest and dividends, net of investment fees of $231,487 in 2017 and $375,223 in 2016	1,497,998	295,076	—	1,793,074	1,491,743
Realized and unrealized gain (loss) on investments (note 4)	9,304,410	1,846,096	—	11,150,506	(1,994,005)
Pension and post-retirement changes other than net periodic costs (notes 7 and 8)	1,669,789	—	—	1,669,789	(2,204,013)
Increase (decrease) in net assets (note 9)	10,742,389	(806,772)	(100,000)	9,835,617	(4,328,480)
Net assets at beginning of year	65,801,462	23,173,756	—	88,975,218	93,303,698
Net assets at end of year	$ 76,543,851	22,366,984	(100,000)	98,810,835	88,975,218

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

YEARS ENDED JUNE 30, 2017 AND 2016

	2017	2016
Cash flows from operating activities:		
Increase (decrease) in net assets	$ 9,835,617	(4,328,480)
Adjustments to reconcile increase (decrease) in net assets to net cash (used in) provided by operating activities:		
Depreciation and amortization	5,600,951	7,209,405
Gain on sale of fixed assets	—	(1,459,119)
Realized and unrealized (gain) loss on investments	(11,150,506)	1,994,005
Bad debt (recovery) expense	(500)	10,360
Pension and post-retirement changes other than net periodic costs	(1,669,789)	2,204,013
Change in operating assets and liabilities:		
Accounts receivable	2,895,221	(4,409,303)
Due from The ASME Foundation, Inc.	88,478	186,604
Inventories	13,594	202,228
Prepaid expenses, deferred charges and deposits	(1,032,242)	385,318
Accounts payable and accrued expenses	(748,994)	(1,975,222)
Accrued employee benefits	(4,179,336)	(3,334,142)
Deferred publications revenue	(9,608,175)	9,473,240
Deferred dues revenue	(285,138)	(412,040)
Accreditation and other deferred	297,153	(67,534)
Deferred rent	(502,298)	1,684,342
Net cash (used in) provided by operating activities	(10,445,964)	7,363,675
Cash flows from investing activities:		
Purchases of investments	(39,867,382)	(46,172,124)
Proceeds from sales of investments	52,753,323	34,232,839
Acquisition of fixed assets	(866,831)	(2,971,189)
Proceeds from sale of fixed assets	—	3,430,079
Net cash provided by (used in) investing activities	12,019,110	(11,480,395)
Net increase (decrease) in cash and cash equivalents	1,573,146	(4,116,720)
Cash and cash equivalents at beginning of year	10,455,723	14,572,443
Cash and cash equivalents at end of year	$ 12,028,869	10,455,723

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

JUNE 30, 2017 AND 2016

(1) Organization

Founded in 1880, The American Society of Mechanical Engineers (the Society), also known as ASME, is the premier organization for promoting the art, science and practice of mechanical engineering throughout the world. The Society is incorporated as a not-for-profit organization in the State of New York and is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code (the Code).

The Society's mission is to serve diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life, and communicating the excitement of engineering.

The Society has seven limited liability corporations (LLC) that are consolidated into the Society's financial statements. These are Innovative Technologies Institute (ITI) LLC, Standards Technology (ST) LLC, Asia Pacific (AP) LLC, Engineering for Change (E4C) LLC, East Asia Holding LLC (EAH), ASME India Private LTD (India) and Personnel Certifications, LLC (PCLLC). ITI develops standards primarily in the risk assessment/management area. ST develops standards for emerging technologies. AP promotes the understanding and use of ASME Codes & Standards, along with other ASME services, in the growing markets of the Asia Pacific region. E4C facilitates the development of affordable, locally appropriate and sustainable solutions to the most pressing humanitarian challenges. EAH is a shareholder of India. India promotes awareness and use of the broad array of ASME products and services in the growing India market. PCLLC enables individuals to achieve certifications to bring back to their sponsoring organization to provide best-practices. These operations are included in the designated and restricted column of the consolidated financial statements. All significant intercompany transactions have been eliminated.

The accompanying consolidated financial statements do not include all of the Society's sections (unincorporated geographical subdivisions, which are not controlled by the Society). In addition, they do not include The ASME Foundation, Inc. (the Foundation) or The American Society of Mechanical Engineers Auxiliary, Inc. (the Auxiliary), which are separately incorporated organizations affiliated with, but not controlled by, the Society.

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting

The consolidated financial statements have been prepared on the accrual basis of accounting.

(b) Basis of Presentation

The Society's net assets, revenue, gains, and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, the net assets of the Society and changes therein are classified and reported as follows:

Unrestricted net assets – Net assets that are not subject to donor-imposed stipulations.

Temporarily restricted net assets – Net assets subject to donor-imposed stipulations that will be met either by actions of the Society and/or the passage of time. In addition, these net assets include unappropriated earnings on donor-restricted endowment.

Permanently restricted net assets – Net assets subject to donor-imposed stipulations that they be maintained permanently by the Society. Generally, the donors of these assets permit the Society to use all or part of the income earned on related investments for general or specific purposes.

Revenues are reported as increases in unrestricted net assets unless their use is limited by donor-imposed restrictions. Expenses are reported as decreases in unrestricted net assets. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in unrestricted net assets unless their use is restricted by explicit donor-stipulation or by law. Expirations of temporary restrictions on net assets (i.e., the donor stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as net assets released from restrictions. Restricted contributions are recorded as unrestricted revenues if the restrictions are fulfilled in the same time period in which the contribution is received.

(Continued)

(c) Revenue and Expenses

The Society's revenue and expenses are classified in a functional format. Classifications are composed principally of the following:

Codes and Standards – Revenue includes publication sales of Codes and Standards. Revenue from the sale of Codes and Standards is recognized over the life of the code sold. The principal product affecting revenue and expenses for this financial statement component is the Society's Boiler and Pressure Vessel Code (the Boiler Code). The Boiler Code is published every two years. The 2017 Boiler Code was released in July 2017.

Conformity Assessment – Revenue includes accreditation program fees. All accreditation revenues and expenses are recognized in the period that the accreditation process is completed and certificates and/or stamps are issued.

Learning and Development – Revenue includes registration fees for and publication sales related to continuing education courses provided by the Society. Revenue and expenses are recognized in the period the program is held.

Programs – Revenue is composed principally of Foundation and government grant, conference and workshop revenue. Grant revenue is recognized as expenses are incurred. Conference and workshop fees are recognized in the period the program is held. Expenses relate to the Society's programs to identify emerging issues of interest to members and the engineering profession at large.

Technical Events and Content (TEC) and Institutes – TEC revenue is composed principally of technical division meetings and conference fees, as well as revenue from research activities. All conference and meeting fees are recognized in the period the program is held. Research revenue is recognized as expenses are incurred. Expenses are associated with the Society's technical activities, including research. Institutes revenue includes all registration fees for continuing education courses and meeting, conference and exhibit fees from the International Gas Turbine Institute (IGTI) and the International Petroleum Technology Institute (IPTI) (collectively, the Institutes). All fees are recognized in the period the program is held. Expenses relate to the Institutes' continuing education program, development and accreditation of engineering curricula, and to IGTI and IPTI technical activities.

Publications – Revenue includes publication sales. Publication sales are recognized upon shipment of the publications except for some subscription based activity where the revenue is recognized over the term of the subscription. Expenses relate to publication activities.

Technology Advancement and Business Development – Revenue includes incremental revenues associated with new technologies and business opportunities. Expenses relate to the Society's mission to provide technical and policy advice to government; assure quality in engineering education; support increasing diversity of women and minorities in the engineering profession and their active involvement in the Society; dissemination of information to the public; and for government and private-sponsored programs for improving engineering education, global development, diversity in the profession, public awareness and development of future Society leaders.

Constituent Engagement – Revenue includes member dues and royalties from membership-based affinity programs. Member dues are recognized over the applicable membership period. Affinity revenue is recognized over the term of the scheduled payment period. Expenses relate to membership activities, as well as membership standards, grades, recruitment and retention, and to the Society's technical activities.

(d) Cash Equivalents

Cash equivalents include commercial paper with original maturities of three months or less, and money market funds that are not maintained in the investment portfolio.

(Continued)

(e) Accounts Receivable

As of June 30, 2017 and 2016, the Society determined that an allowance for uncollectible accounts is necessary for accounts receivable in the amount of $278,000. This determination is based on historical loss experience and consideration of the aging of the accounts receivable. Accounts receivables are written off when all reasonable collection efforts have been exhausted.

(f) Inventories

Inventories are stated at lower of cost or market. Unit cost, which consists principally of publication printing costs, is determined based on average cost.

(g) Investments

Investments are reported at fair value (see note 4). Although available for operating purposes when necessary, the investment portfolio is generally considered by management to be invested on a long-term basis. Realized and unrealized gains and losses are recognized as changes in net assets in the periods in which they occur. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Purchases and sales of securities are recorded on a trade-date basis.

Fair value measurements are based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In order to increase consistency and comparability in fair value measurements, a fair value hierarchy prioritizes observable and unobservable inputs used to measure fair value into three levels, as described in note 4.

(h) Property, Furniture, Equipment and Leasehold Improvements

Property, furniture and equipment are depreciated on a straight-line basis over the estimated useful lives of the assets, which range from 3 to 30 years. Leasehold improvements are amortized over the lease term or the useful life of the asset, whichever is less. The Society capitalizes all assets with a cost of $3,000 or more and a useful life of more than one year.

(i) Nonoperating Activities

The consolidated statements of activities distinguish between operating and nonoperating activities. Nonoperating activities include investment return (interest and dividends, as well as realized and unrealized gains and losses on investments) and certain pension and post-retirement changes. All other activities are classified as operating.

(j) Designated Funds

The Designated Funds are primarily made up of the ASME Development Fund, the ASME Custodial Funds, ITI, ST, AP, E4C, India and the PCLLC funds. The ASME Development Fund is funded by member voluntary contributions for the purpose of launching new programs. The ASME Custodial Funds hold and invest institute, division and section funds. These funds are used by institutes, divisions and sections to support engineering discipline specific programs and local engineering programs.

(k) Uncertain Tax Positions

There are certain transactions that could be deemed unrelated business income and would result in a tax liability. Management reviews transactions to estimate potential tax liabilities using a threshold of more likely than not. It is management's estimation that there are no material income tax liabilities that need to be recorded at June 30, 2017 or 2016.

(l) Functional Expenses

The costs of providing the various programs and other activities of the Society have been summarized on a functional basis in the consolidated statements of activities. Accordingly, certain costs have been allocated among program services and supporting services.

(m) Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and assumptions that affect certain reported amounts and disclosures at the date of the consolidated financial statements and the reported amounts of

(Continued)

revenue, expenses and other changes in net assets during the reported period. Significant estimates include the allowance for doubtful accounts, the valuation of investments and the assumptions used to account for pension and postretirement obligations. Actual results could differ from those estimates.

(n) Reclassifications

There were reclassifications made to certain 2016 amounts to conform with the current year presentation.

(3) Transactions with Related Parties

The Society performs certain administrative functions for the Foundation. The Society charges the Foundation for all direct expenses along with additional charges for office space and other support services. In fiscal years 2017 and 2016, such charges totaled $251,614 and $468,871, respectively, which represent the costs of these charges and services and are recorded in general administration expense in the consolidated statements of activities.

In fiscal years 2017 and 2016, the Foundation made total contributions of approximately $188,000 and $115,000, respectively, to the Society in support of ISHOW and Engineering for Change (E4C) and is included in programs revenue. In fiscal years 2017 and 2016, the Society contributed $538,250 and $520,888, respectively, for award programs to the Foundation and recorded the contributions in program expenses in the consolidated statements of activities.

Additionally, the Society pays the Foundation's invoices with third parties. At June 30, 2017 and 2016, the Society recorded an amount due from the Foundation in the amount of $279,289 and $367,767, respectively, for amounts paid on behalf of the Foundation.

The Society performs certain administrative functions for the Auxiliary. The Society charges for all direct expenses along with additional charges and then records a donation for the services. In fiscal years 2017 and 2016, such charges totaled $30,506 and $42,089, respectively. The contributed services are included in the supporting services sector expenses in the accompanying consolidated statements of activities.

(4) Investments

Investments of the Society, as well as amounts held on behalf of the Auxiliary, are combined on a fair value basis. Financial Accounting Standards Board (FASB) guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date and sets out a fair value hierarchy. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under Accounting Standards Codification (ASC) Topic 820 are described below:

Level 1: Unadjusted quoted prices or published net asset value for funds with characteristics similar to a mutual fund in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

Level 2: Inputs other than quoted prices within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Inputs that are unobservable for the asset or liability and that include situations where there is little, if any, market activity for the asset or liability. The inputs into the determination of fair value are based upon the best information in the circumstances and may require significant management judgment or estimation.

In determining fair value, the Society utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible in its assessment of fair value. The following methods and assumptions were used in estimating the fair values of significant financial instruments at June 30, 2017 and 2016:

(Continued)

Common Stock

Common stocks are valued at the closing price reported on the active market on which the individual securities are traded. Shares are liquid with conversion to cash generally within a few days.

Mutual Funds

Mutual funds are valued based upon quoted or published prices determined in an active market. There are no restrictions on redemptions of these funds, and they can be redeemed daily.

Investments, measured at fair value on a recurring basis, are classified as Level 1 and consisted of the following at June 30, 2017 and 2016:

	2017	2016
Common stock:		
U.S. large cap	$ 13,996,690	13,124,977
Equity – mutual funds:		
Large blend	28,748,967	29,913,465
Foreign large blend	21,938,784	19,903,516
Small blend	6,412,336	5,956,556
Aggressive allocation	2,311,523	2,206,025
Energy	2,517,095	2,542,644
Natural resources	814,266	782,231
Mutual funds – bonds and fixed income	47,779,716	51,989,384
Money market funds	354,496	134,691
Total portfolio	124,873,873	126,553,489
Less:		
Undivided interest held on behalf of the Auxiliary	1,481,701	1,425,882
Total ASME	$123,392,172	125,127,607

Realized and unrealized gain/(loss) on investments for the years ended June 30, 2017 and 2016 consists of the following:

	2017	2016
Realized gain on investment transactions	$ 3,587,114	1,564,987
Unrealized gain/(loss)	7,563,392	(3,558,992)
	$ 11,150,506	(1,994,005)

(5) Property, Furniture, Equipment and Leasehold Improvements

Property, furniture, equipment and leasehold improvements at June 30, 2017 and 2016 consist of the following:

	2017	2016
Computer equipment	$ 40,137,992	39,279,497
Leasehold improvements	15,805,090	15,805,090
Furniture and fixture	4,555,277	8,177,819
Others	53,242	53,243
	60,551,601	63,315,649
Less accumulated depreciation and amortization	(41,806,271)	(39,836,199)
	$ 18,745,330	23,479,450

Construction in progress of $674,000 is included in the above property, furniture, equipment and leasehold improvements at June 30, 2017. The estimated cost to complete these projects at various dates through July 2020 is approximately $1,870,000.

Depreciation and amortization expense amounted to $5,600,951 and $7,209,405 for the years ended June 30, 2017 and 2016, respectively. During the years ended June 30, 2017 and 2016, ASME wrote off fully depreciated property and equipment amounting to $3,630,879 and $3,065,051, respectively.

(Continued)

(6) Operating Revenue

Operating revenue is presented principally by sector in the accompanying consolidated statements of activities. Set forth below is revenue for the years ended June 30, 2017 and 2016, summarized by type:

	2017	2016
Membership dues	$ 7,346,105	7,837,888
Codes and standards and technical publication revenue	47,202,542	54,098,184
Accreditation revenue	32,521,461	31,193,643
Conferences, exhibits and course fees	17,564,128	18,902,780
Other operating revenue	4,521,687	3,479,297
Miscellaneous	299,731	1,650,747
	$ 109,455,654	117,162,539

(7) Pension Plans

(a) Defined Benefit Pension Plan

The Society has a noncontributory defined benefit pension plan (the Plan) covering approximately 46% of its employees. Normal retirement age is 65, but provisions are made for early retirement. Benefits are based on salary and years of service. The Society funds the Plan in accordance with the minimum amount required under the Employee Retirement Income Security Act of 1974, as amended. The Society uses a June 30 measurement date.

The funded status reported in the consolidated statements of financial position as of June 30, 2017 and 2016 was measured as the difference between fair value of plan assets and the benefit obligation on a plan-by-plan basis.

The following table provides information with respect to the Plan as of and for the years ended June 30, 2017 and 2016:

	2017	2016
Benefit obligation at June 30	$ (77,081,267)	(78,593,880)
Fair value of plan assets at June 30	57,548,119	55,207,924
Funded status	$ (19,533,148)	(23,385,956)

	2017	2016
Amounts recognized in the consolidated financial statements:		
Accrued employee benefits	$ 19,533,148	23,385,956
Net periodic benefit cost	(1,053,639)	(4,383,944)
Settlement loss	(2,163,261)	—
Curtailment gain	—	2,014,101
Employer contributions	6,000,000	6,000,000
Benefits paid	(7,585,974)	(2,980,365)
Weighted average assumptions used to determine benefit obligations at June 30:		
Discount rate	3.98%	3.78%
Rate of compensation increase	3.50	3.50
Weighted average assumptions used to determine net periodic benefit cost for the years ended June 30, 2017 and 2016:		
Discount rate	3.78%	4.55%
Expected return on plan assets	6.50	6.50
Rate of compensation increase	N/A	3.50

The accumulated benefit obligation for the Plan was $77,081,267 and $78,593,880 at June 30, 2017 and 2016, respectively.

Other changes in plan assets and benefit obligations recognized in the change in unrestricted net assets for the years ended June 30, 2017 and 2016 are as follows:

	2017	2016
Net loss	$ (1,787,070)	(10,134,764)
Amortization of net actuarial loss	693,517	2,433,577
Amortization of prior service credit	—	(425,432)
Effect of curtailment on prior service credit	—	(2,014,101)
Effect of settlement/ curtailment on net actuarial loss	2,163,261	7,792,616
Net amount recognized in change in unrestricted net assets	$ 1,069,708	(2,348,104)

(Continued)

Notes to Consolidated Financial Statements

JUNE 30, 2017 AND 2016

Amounts that have not been recognized as components of net periodic benefit cost but included in unrestricted net assets to date as of June 30, 2017 and 2016 are as follows:

	2017	2016
Net actuarial loss	$ 27,470,357	28,540,065

Amounts in unrestricted net assets and expected to be recognized as components of net periodic benefit cost in fiscal year 2018 are as follows:

Net loss	$ 678,182

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid as follows:

	AMOUNT
Year(s) ending June 30:	
2018	$ 3,944,874
2019	4,492,400
2020	4,711,341
2021	4,762,450
2022	4,627,424
2023 – 2027	24,017,962

On June 6, 2016, the Society adopted a resolution to freeze the Plan prior to December 31, 2016. This action eliminates the accrual of defined benefits for future services and, therefore, constitutes a curtailment of the Plan. As a result of the above actions, the projected benefit obligation decreased by $7,792,616 in 2016. A curtailment gain of $2,014,101 is recognized as an operating activity in the 2016 consolidated statement of activities. During 2017, Plan participants requested lump sum payments exceeding the sum of service cost and interest cost. As a result of the above action, the projected benefit obligation decreased by $6,070,066 in 2017. A settlement loss of $2,163,261 is recognized as an operating activity in the 2017 consolidated statement of activities.

The following table presents the Plan's assets measured at fair value as of June 30, 2017 and 2016. At June 30, 2017 and 2016, the assets in the Plan's investment portfolio were considered Level 1.

	2017	2016
Equity – mutual funds:		
Large blend	$ 12,169,862	13,758,880
Foreign large blend	6,147,234	5,684,424
Energy	2,724,080	2,215,296
Natural resources		—
Money market fund	908,022	452,442
Bonds and fixed income – mutual funds	35,598,921	33,096,882
Total ASME pension plan and trust assets	$ 57,548,119	55,207,924

The following methods and assumptions were used in estimating the fair values of significant financial instruments at June 30, 2017 and 2016:

Mutual Funds

Mutual funds that are valued upon quoted market prices determined in an active market are considered Level 1 in the fair value hierarchy. There are no restrictions on any of these funds and they can all be redeemed daily.

The pension investments are managed to provide a reasonable investment return compared to the market while striving to preserve capital and provide cash flows required for distributions. The portfolio is diversified among investment managers and mutual funds selected by the Plan's trustees using the advice of an independent performance evaluator.

The expected long-term rate of return for the Plan's total assets is based on both the Society's historical rate of return and the expected rate of return on the Society's asset classes, weighted based on target allocations for each class. The Society's pension plan weighted average asset allocations at June 30, 2017 and 2016, by asset category, are as follows:

	2017	2016
Mutual funds invested in equity securities	35%	36%
Mutual funds invested in debt securities	65	63
Other	—	1
	100%	100%

The Society expects to contribute $9,000,000 to the Plan in fiscal year 2018.

(Continued)

(b) Benefit Restoration Plan

In 1994, ASME initiated the ASME Benefit Restoration Plan (SERP) in order to "restore" more highly compensated employees to a measure of parity with employees who earn lower amounts and whose full compensation is taken into account for purposes of calculating retirement plan contributions. ASME's SERP is a nonqualified, unfunded deferred compensation plan for the benefit of certain ASME executives whose compensation exceeds a federally imposed limit on the amount of compensation that can be contributed to qualified (i.e., tax-exempt) retirement plans.

On June 6, 2016, the Society adopted a resolution to freeze the SERP prior to December 31, 2016. This action eliminates the accrual of defined benefits for future services and, therefore, constitutes a curtailment of the Plan. As a result of the above actions, the projected benefit obligation decreased by $361,802 in 2016. A curtailment gain of $206,039 is recognized as an operating activity in the 2016 consolidated statement of activities. The obligation was remeasured at February 1, 2016, due to settlement accounting triggered by the lump sum payments made during January 2016 using discount rate of 4.38%. A settlement loss of $297,251 is recognized as an operating activity in the 2016 consolidated statement of activities. During 2017, the SERP was fully transitioned to a deferred compensation plan under Section 457(f) of the Internal Revenue Code, which triggered a settlement as of December 31, 2016. The obligation was remeasured at December 31, 2016, using a discount rate of 4.12%. A settlement loss of $574,475 is recognized as an operating activity in the 2017 consolidated statement of activities.

The following table provides information with respect to the SERP as of and for the years ended June 30, 2017 and 2016:

	2017	2016
Benefit obligation at June 30	$ —	(995,875)
Fair value of plan assets at June 30	—	—
Funded status	$ —	(995,875)
Amounts recognized in the consolidated financial statements:		
Accrued employee benefits	$ —	995,875
Net periodic benefit cost	(47,339)	(100,165)
Settlement loss	(574,475)	(297,251)
Curtailment gain	—	206,039
Employer contributions	—	502,028
Benefits paid	—	(502,028)
Weighted average assumptions used to determine benefit obligations at June 30:		
Discount rate	N/A	3.44%
Rate of compensation increase	N/A	3.50
Weighted average assumptions used to determine net periodic benefit cost for the years ended June 30, 2017 and 2016:		
Discount rate	3.44/4.12%	4.55/4.38%
Rate of compensation increase	3.50	3.50

The accumulated benefit obligation for the SERP was $995,875 at June 30, 2016.

Other changes in SERP assets and benefit obligations recognized in the change in unrestricted net assets for the years ended June 30, 2017 and 2016 are as follows:

	2017	2016
Net loss	$ (99,414)	(301,796)
Amortization of net actuarial loss	6,190	53,631
Amortization of prior service credit	—	(52,322)
Effect of settlement/ curtailment on prior sevice credit	—	(206,039)
Effect of settlement/ curtailment on net actuarial loss	574,475	659,053
Net amount recognized in change in unrestricted net assets	$ 481,251	152,527

(Continued)

Amounts that have not been recognized as components of net periodic benefit costs but included in unrestricted net assets to date are as follows:

	2017	2016
Net actuarial loss	$ —	481,251
Net amounts recognized in unrestricted net assets	$ —	481,251

(c) Defined Contributions Plan

The Society has a qualified defined contribution plan covering all eligible full-time employees hired after December 31, 2005. The Society is required to make contributions in accordance with the pension plan agreement. The maximum plan contribution per year will not exceed the amount permitted under IRS Code Section 415, and will also be subject to the limitations of IRS Code Section 403(b). Pension expense for the years ended June 30, 2017 and 2016 are $255,642 and $411,065, respectively.

The Society also maintains a thrift plan under Section 403(b) of the Code covering substantially all employees. The Society's contribution was approximately $536,175 and $1,075,958 for the years ended June 30, 2017 and 2016, respectively.

On January 1, 2017, the Society no longer contributed to the qualified defined contribution plan and thrift plan and began contributing to retirement plan under Section 401(k) of the Code covering substantially all employees. The Society's contribution was approximately $1,725,255 for the year ended June 30, 2017.

(8) Postretirement Healthcare and Life Insurance Benefits

The Society provides certain healthcare and life insurance benefits to retired employees (the Postretirement Plan). For eligible retirees hired prior to 1995, the life insurance benefit is noncontributory and the healthcare coverage is subsidized by the Society. The Society no longer provides life insurance benefits to retirees. The Society currently permits eligible early retirees (55 with twenty years of service or age 62 with ten years of service) to remain on the group health insurance plan until age 65, by paying the full insurance cost. The estimated cost of such benefits is accrued over the working lives for those employees expected to qualify for such benefits. The Society uses a June 30 measurement date. This benefit was terminated for current employees as of July 1, 2005, and is in effect only for then-current participants.

The following tables provide information with respect to the postretirement benefits as of and for the years ended June 30, 2017 and 2016:

	2017	2016
Postretirement benefit obligation	$ (2,270,181)	(2,359,365)
Accrued benefit recognized	(2,270,181)	(2,359,365)
Net periodic postretirement benefit cost	77,530	71,985
Employer contribution	47,884	72,910
Plan participants' contribution	97,613	44,267
Benefits paid	145,497	117,177

	2017	2016
Weighted average assumptions used to determine benefit obligations at June 30:		
Discount rate	3.60%	3.24%
Expected return on plan assets	N/A	N/A
Rate of compensation increase	3.50	3.50
Healthcare cost trend:		
Increase from current year to next fiscal year	7.00	7.50
Ultimate rate increase	5.00	5.00
Fiscal year that the ultimate rate is attained	2022	2022

(Continued)

	2017	2016
Weighted average assumptions used to determine net periodic benefit cost for the years ended June 30, 2017 and 2016:		
Discount rate	3.24%	3.98%
Expected return on plan assets	N/A	N/A
Rate of compensation increase	N/A	3.50
Healthcare cost trend:		
Increase from current year to next fiscal year	7.50	8.00
Ultimate rate increase	5.00	5.00
Fiscal year that the ultimate rate is attained	2022	2022

Other changes in postretirement plan assets and benefit obligations recognized in the change in unrestricted net assets for the years ended June 30, 2017 and 2016 are as follows:

	2017	2016
Net actuarial gain	$ 145,113	17,847
Prior service credit	(26,283)	(26,283)
Net amount recognized in unrestricted net assets	$ 118,830	(8,436)

Amounts that have not been recognized as components of net periodic benefit costs, but included in unrestricted net assets to date as of June 30, 2017 and 2016, are as follows:

	2017	2016
Net gain	$ (997,225)	(852,112)
Prior service credit	(39,954)	(66,237)
Net amount recognized in unrestricted net assets	$ (1,037,179)	(918,349)

Estimated amounts that will be amortized from unrestricted net assets into net periodic benefit cost in the fiscal year ending in 2018 are as follows:

	2017
Amortization of gain	$ 67,621
Prior service credit	(26,283)

Healthcare cost rate trends:

1. Assumed health care cost trend rate for the next year	7.0%
General description of the direction and pattern of change in the assumed trend rates thereafter	(0.5)% per year to 5.0%, then 5.0% thereafter
Ultimate trend rate and when that rate is expected to be achieved	5.0%
2. One percentage point increase:	
Effect on total service and interest cost	$ 16,864
Effect on end of year postretirement benefit obligation	134,950
3. One percentage point decrease:	
Effect on total service and interest cost	$ (14,496)
Effect on end of year postretirement benefit obligation	(118,444)

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid as follows:

	AMOUNT
Year(s) ending June 30:	
2018	$ 170,145
2019	176,264
2020	180,713
2021	178,434
2022	181,972
2023 – 2027	953,353

(Continued)

(9) Temporarily and Permanently Restricted Net Assets

Temporarily and permanently restricted net assets and the income earned on permanently restricted net assets are restricted by donors to the following purposes at June 30, 2017 and 2016:

	2017		2016	
	TEMPORARILY RESTRICTED	PERMANENTLY RESTRICTED	TEMPORARILY RESTRICTED	PERMANENTLY RESTRICTED
Award programs	$ 236,197	40,110	216,040	40,110
The engineering library	129,078	74,695	136,393	74,695
Membership programs	1,536	21,762	501	21,762
	$ 366,811	136,567	352,934	136,567

Temporarily restricted net asset activity has not been separately presented in the consolidated statements of activities. There was no activity in permanently restricted net assets during 2017 or 2016. Temporarily restricted activity for 2017 and 2016 is summarized below:

	2017	2016
Interest and dividends, net of investment fees	$ 7,182	6,197
Realized and unrealized (loss) gain in fair value of investments	44,591	(8,849)
Net assets released from restrictions	(37,896)	(34,616)
Increase (decrease) in temporarily restricted in net assets	$ 13,877	(37,268)

The increase (decrease) in unrestricted net assets in 2017 and 2016 was $9,821,740 and $(4,291,212), respectively.

(10) Endowment Net Assets

The Society recognized that New York State adopted as law the New York Prudent Management of Institutional Funds Act (NYPMIFA) on September 17, 2010. NYPMIFA replaced the prior law, which was the Uniform Management of Institutional Funds Act (UMIFA).

In addition, NYPMIFA created a rebuttable presumption of imprudence if an organization appropriates more than 7% of a donor-restricted permanent endowment fund's fair value (averaged over a period of not less than the preceding five years) in any year. Any unappropriated earnings that would otherwise be considered unrestricted by the donor will be reflected as temporarily restricted until appropriated.

The Society's Board of Governors has interpreted NYPMIFA as allowing the Society to appropriate for expenditure or accumulate so much of an endowment fund as the Society determines is prudent for the uses, benefits, purposes and duration for which the endowment fund was established, subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise, the assets in a donor-restricted endowment fund shall be donor-restricted assets until appropriated for expenditure by the Board of Governors. As a result of this interpretation, the Society has not changed the way permanently restricted net assets are classified. See note 2 for how the Society classifies its net assets.

The Society's investment policy is to provide for safety and marketability of principal, maintenance of purchasing power, reasonable yield on invested funds and minimum idle cash in working funds. Any surplus should be invested. The policy has charged the Committee on Finance and Investments (COFI) with investment decision

(Continued)

responsibility. The policy further states that the COFI will have the advice of professional counsel in deciding the desired ratio of equities to fixed-income securities, and in deciding investment purchases and sales. To this end, the COFI uses the professional firm of Lowery Asset Consulting (LAC). LAC does not trade in any securities, only provides analysis and advice. The current equity-to-fixed ratio goal is 60% equity to 40% fixed, dependent on market conditions.

Changes in endowment net assets for the year ended June 30, 2017 are as follows:

	TEMPORARILY RESTRICTED	PERMANENTLY RESTRICTED	TOTAL ENDOWMENT INVESTMENTS
Endowment net assets, beginning of year	$ 352,934	136,567	489,501
Investment activity:			
Interest and dividends	7,182	—	7,182
Realized gain on investments	14,229	—	14,229
Unrealized gain on investments	30,362	—	30,362
Total investment activities	51,773	—	51,773
Amount appropriated for expenditures	(37,896)		(37,896)
Endowment net assets, end of year	$ 366,811	136,567	503,378

Changes in endowment net assets for the year ended June 30, 2016 are as follows:

	TEMPORARILY RESTRICTED	PERMANENTLY RESTRICTED	TOTAL ENDOWMENT INVESTMENTS
Endowment net assets, beginning of year	$ 390,202	136,567	526,769
Investment activity:			
Interest and dividends	6,197	—	6,197
Realized gain on investments	6,535	—	6,535
Unrealized loss on investments	(15,384)	—	(15,384)
Total investment activities	(2,652)	—	(2,652)
Amount appropriated for expenditures	(34,616)		(34,616)
Endowment net assets, end of year	$ 352,934	136,567	489,501

Endowment net assets of $503,378 and $489,501 are included with investments in the consolidated statements of financial position at June 30, 2017 and 2016, respectively.

(Continued)

(11) Commitments and Contingencies

The Society's principal offices are located at 2 Park Avenue, New York, under a lease expiring on March 31, 2028. In connection with this lease, the Society has provided as security a $2,134,133 letter of credit. No amounts have been drawn against this letter of credit.

The lease for 2 Park Avenue includes free rent concessions and scheduled rent increases that have been recognized on a straight-line basis over the term of the lease. The accumulated difference between rent expense and cash payments is included in liabilities as deferred rent in the accompanying consolidated statements of financial position.

The Society has a lease agreement for their New Jersey Office, entered into on November 8, 2014 and expiring on July 31, 2026 for the property located at 150 Clove Road, 6th Floor, Little Falls, New Jersey.

The Society has another lease agreement, expiring on October 31, 2022 for the property located at 1828 L Street NW, Washington, DC.

In addition to above leases, the Society also has a number of other lease commitments for regional offices and office equipment expiring through 2026.

The following is a schedule of the approximate minimum future rentals on all leases at June 30, 2017:

	AMOUNT
Year(s) ending June 30:	
2018	$ 5,580,000
2019	5,834,000
2020	5,859,000
2021	5,885,000
2022	5,911,000
2023 – 2028	32,331,000

Rent expense under all of the Society's leases was approximately $5,311,000 and $5,266,000 in 2017 and 2016, respectively.

(12) Line of Credit

The Society had established a $5,000,000 secured, uncommitted line of credit to service short-term working capital needs. The line of credit, renewable annually, expires on December 31, 2017. Terms are LIBOR plus 1.50%, (which is 3.2384% and 2.7303% at June 30, 2017 and 2016, respectively), the bank has a general lien on the assets of the Society, and interest will be automatically deducted from the Society's bank account monthly. As of and during the years ended June 30, 2017 and 2016, the Society had not drawn any funds from this line of credit.

(13) Concentration of Credit Risk

Cash and cash equivalents that potentially subject the Society to a concentration of credit risk include cash accounts with banks that exceed the Federal Deposit Insurance Corporation (FDIC) insurance limits. Interest-bearing accounts are insured up to $250,000 per depositor. Beginning in 2013, noninterest-bearing accounts are insured the same as interest-bearing accounts. As of June 30, 2017 and 2016, cash accounts in financial institutions exceeded the federal insured limits by approximately $11,258,000 and $8,776,000, respectively, of cash and cash equivalents held by banks that exceeded FDIC limits. Such excess includes outstanding checks.

Within accounts receivable, there are receivables from one company that represent 23% and 26% of accounts receivables at June 30, 2017 and 2016, respectively.

(14) Subsequent Events

ASME has evaluated, for potential recognition and disclosure, events subsequent to the date of the consolidated statement of financial position through September 18, 2017, the date the consolidated financial statements were available to be issued.

Donor Report 2016-2017

ASME FOUNDATION

Funding Excellence in Engineering

From the Chair & Interim Executive Director

hese are e citin times to e a mem er of the A o ndation comm nit e e ratin the accom ishments of the ast ear e are ener i ed a sense of o timism and o ort nit as e contin e to ro in r ose im act and donor en a ement

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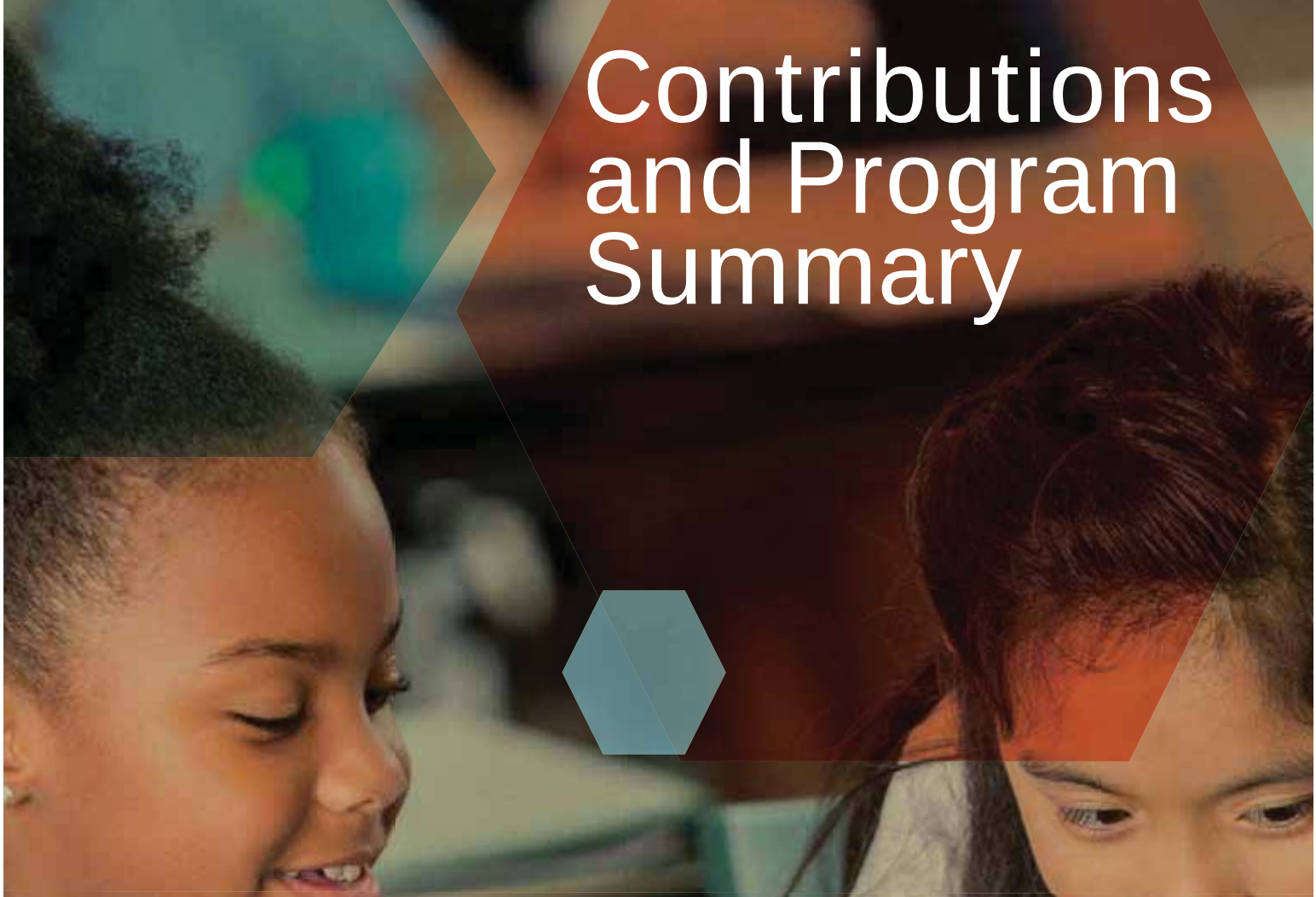
We have awarded **56** scholarships in academic **2016-2017 –** ranging from **1,500** to **13,000**

Contributions and Program Summary



Contributions

Total: 1.49 Million

540,000 – ASME Institutes, Divisions, and Section Gifts
470,000 – Individual nrestricted Gifts
210,000 – Corporate and Foundation Gifts
140,000 – Planned Giving Gifts
130,000 – Individual Program Funding

Program Funding

Total 1.73 Million

750,000 – K-12 STEM Education Programs
310,000 – Federal Fellows and Public Policy Programs
280,000 – Engineering onors and Awards
210,000 – Scholarships
150,000 – Engineering for Global Development Program
30,000 – niversity Student Program

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Southeast National Marine
Renewable Energy Center
College of Engineering and
Computer Science
Florida Atlantic University Retired

ARCHIMEDES CLUB

Since 2003, the Archimedes Club has united the ASME planned giving community in the common goal of supporting programs that will help advance the engineering profession.

Membership in the Archimedes Club is open exclusively to those generous supporters who remember the ASME Foundation in their will or estate planning. By choosing to make a planned gift in your will, charitable lead or remainder trusts, or through a charitable gift annuity, **you can feel confident that you are helping to ensure the future of ASME's impact.**

In recognition of this special commitment, Archimedes Club members will receive a commemorative brass display to identify them as a **prominent supporter; listing as an Archimedes Club member in the Foundation's annual donor report and website; and invitations to donor receptions at select ASME meetings.**

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ALEXANDER HOLLEY SOCIETY

Holley Society members provide ASME with crucial resources to advance the engineering profession and help transform the world through unique engineering-based programs.

Founded in 2011, the Holley Society, named after one of the founders of ASME, showcases the Foundation's appreciation and support of its top donors. These leadership contributions are crucial funds that are used to serve the immediate needs of ASME programs. Holley Society members are honored with a distinct lapel pin that designates them as a member in this exclusive society.

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Donor Honor Roll

THE SUPPORT PROVIDED BY THE ASME FOUNDATION, thro h its ortfo io of ro rams scho arshi s and a ards is enhanced eca se of the enerosit of these donors his honor ro is one a of ac no ed in the ita contri tions of o r donors as e stri e to e ood ste ards of their ifts o ether these ifts increase o r ability to positively influence a brighter future for students, engineers, the field of engineering and humanity. han o

PATRON ($5,000+)
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ancy Fitzroy
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Donor Honor Roll recognition is based on gifts received by the ASME Foundation *during the recent fiscal year* (July 1, 2016 – June 30, 2017).

Scholarships

ASME Foundation Scholarship Recipients for the 20**16-17 Academic Year**

or near thirt ears enero s donors ha e esta ished scho arshi f nds at the A o ndation to i e ac to their en ineerin comm nit n st the ast ten ears the A o ndation has ranted o er mi ion to more than 5 st dents from o er co e es and ni ersities or d ide for the so e r ose of he in deser in en ineerin st dents ad ance in their academic st dies A s scho arshi s match a st dent s interest and a i ities with scholarships focused on specific areas of study of industry affiliation, and are awarded based on leadership skills, scholastic ability, financial need and otentia contri tion to the mechanica en ineerin rofession

1 million


170
colleges
500
students

Annually awarded to ASME university student members

Kenneth Andrew Roe Scholar ($13,000)

Elizabeth Wohlford
Michigan Technological University

ASME Foundation Scholar ($11,000)

Jared Talamini (1st year)
Wentworth Institute of Technology

Meredith Campbell (2nd year)
International Space University, Strasbourg, France

Alexander Blum (3rd year)
University of North Carolina, Charlotte

ASME/SHPE Scholarships ($5,000)

Post-Graduate: **Victor Osorio Martiniz**
San Francisco University

Undergraduate: **Adrian Ramirez**
University of Texas, El Paso

ASME Nuclear Division (NED) Scholarship ($5,000)

Megan LoMonaco
North Carolina State University

Keeton Ross
University of California, Berkeley

Chris Westphalen
Florida Polytechnic University

Garland Duncan Scholarship ($5,000)

Eric Dreischerf
California Polytechnic State University-San Luis Obispo

Tamim Reza
University of Michigan-Flint

Willis F. Thompson Scholarship ($4,500)

Elizabeth Bergh
Michigan Technological University

Michael Kelly
South Dakota School of Mines and Technology

Jerred Tochterman
Texas Technological University

American Electric Power Scholarship ($4,000)

Eduardo Miranda
University of Texas, El Paso

Melvin R. Green Scholarship ($4,000)

Marcus Lacey
University of Cincinnati

Lucas Shearer
University of Hartford

Virginia Tech Scholarship ($4,000)

Jacob Bean
Virginia Polytechnic Institute and State University

William J. & Marijane E. Adams, Jr. Scholarship ($3,000)

Chirawat Sanpakit
University of California, Riverside

ASME Foundation Scholarship

Joseph Coverston
Florida International University

F.W. “Beich” Beichley Scholarship ($3,000)

Paul Mazza
Western New England University

ASME Power Division Scholarship ($3,000)

Katherine Pfleeger
Stanford University

Stephen T. Kugle Scholarship ($3,000)

Joshua Smith
Colorado State University

ASME Metropolitan Section John Rice Memorial Scholarship ($3,000)

Chris Lunger
City College of New York

John & Elsa Gracik Scholarship ($ - Varies)

**In the United States – ($2,500)*

colin Cottingham
University of North Dakota

Gregory Dorian
University of Massachusetts, Lowell

Drew Haxton
Daniel Webster College

Erin Hong
California State University, Northridge

Eric Katzen
Hofstra University

Jordan Landen
South Dakota School of Mines and Technology

Austin Maus
South Dakota School of Mines and Technology

Rachael Reich
Drexel University

Kunyao Yu
Stanford University

**Outside the US – (Amount determined by need and economy of the country-$ Undisclosed)*

Mehmet Aydin
Koc University, Turkey

Jason Hu
University of British Columbia, Canada

Abdel Hamid Kassem
VIA University College, Denmark

ASME Foundation Hanley Scholarship ($2,500)

Alexis Mavity
Purdue University

Marcus N. Bressler Scholarship ($2,000)

Michelle Wood
University of Houston

Kate Gleason Scholarship ($2,000)

Leah Nonis
Michigan State University

Frank & Dorothy Miller Scholarship ($2,000)

Ariel Barber
Rowan University

Gregory Dorian
University of Massachusetts, Lowell

Allen Rhodes Memorial Scholarship ($1,500)

Nathan Morrison
Southern University and A&M College

Asme Auxiliary Scholarship Winners 2016-17 Academic Year

Lucy & Charles W.E. Clarke Scholarship ($5,000)

Thomas Canty
North Carolina State University

Matthew Heisler
George Washington University

Joshua Ivey
Oklahoma State University

Stephanie Linke
Clemson University

Brendan Mulcahy
University of Nevada, Las Vegas

Austin Plummer
University of Maryland, Baltimore County

Austin Purdy
Michigan Technological University

Samuel Ryckman
South Dakota School of Mines and Technology
September St. John
Oregon State University

Avery Wisler
Montana State University

Allen J. Baldwin Scholarship ($3,000)

Jason Michael Bugarin
Worcester Polytechnic Institute

Elizabeth M. & Winchell M. Parsons Scholarship ($3,000)

Kurt Harris
Utah State University

Irma & Robert Bennett Scholarship ($3,000)

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University of Texas, El Paso

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South Dakota State University

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Georgia Institute of Technology

Sylvia W. Farny Scholarship ($3000)

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University of Texas of the Permian Basin

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Philadelphia University

Erin Gibboney
University of Cincinnati

Jesse Long
Utah State University

Rice Cullimore Scholarship ($3,000)

Guillermo Gomez
Virginia Polytechnic Institute and State University
Santiago Tosar
University of Maryland, College Park

ASME INSPIRE: 1,000 Strong and Growing

he third ear is indeed the charm for A as the program finishes the 2017 academic year in more than midd e and hi h schoo s 4 to e e act across 4 states and the istrict of o m ia n terms of c assroom reach more than teachers and near 48 midd e and hi h schoo st dents are en a ed on the atform

orted thro h the enerosit of A o ndation donors and in co a oration ith er i A as introd ced to c assrooms in the fa of 4 as an on ine in c ass e erience desi ned to se amin techno o that eans on codin and a e ra ased s i sets to com ete a series of missions that ce e rate the in o ndin o t the st dent e erience are a series of career cards that hi h i ht ni e and com e in fields in engineering. Over the course of three years, ASME has reached more than st dents across the co ntr

n a the schoo mar ed the ro ram s third ear as art of its c rric m ith a ce e ration here 6 of its si th rade st dents ere reco ni ed for s ccessf com etin a 6 missions of the on ine ro ram rin the e ent st dents shared their career as irations math teacher e desi ner en ineer ame de e o er ne ros r eon a on ith an a reciation for ho rin s a more d namic and f n e ement into their c assroom e erience A to d more than a a aro st dents ha e sed since it as introd ced to the schoo in the fa of 4

e ond the im ressi e n m ers meas rin the im act of a ro ram i e in rea time can e da ntin t the ro ram s e erience at ose h A a a aro choo idd e School in Brooklyn, N.Y., offers insight and validation.

1,034 schools
1,000 teachers
48,000 students

ASME *INSPIRES* the Next Generation

ASME *INSPIRE* is a digital learning program that puts the "E" in STEM by igniting student interest in the pursuit of science, technology, engineering and math careers. Through the use of video, animations and gaming scenarios, *INSPIRE* reinforces the real-world application of critical STEM skills for students across the country.

Here's what students like most about *INSPIRE*

"*INSPIRE* makes you think. This course helps you find interesting careers... and there are a lot of options."

228,000
Total hours of student learning

CUMU

– 1

have

AS

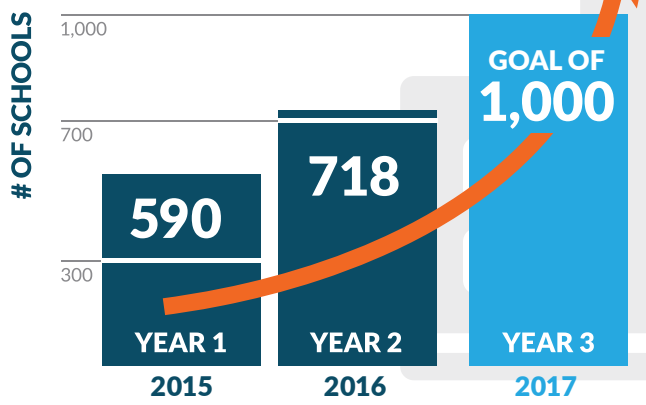
Here's what teachers are saying about *INSPIRE*

2,000+
teachers have implemented *INSPIRE* into their classrooms

94%
of teachers recommend INSPIRE to other teachers

STUDENT-CENTERED
ACTIVELY ENGAGED
INTRODUCES REAL WORLD
INTERACTIVE
MAKES STUDENTS THINK

Annual school growth since *INSPIRE's* inception

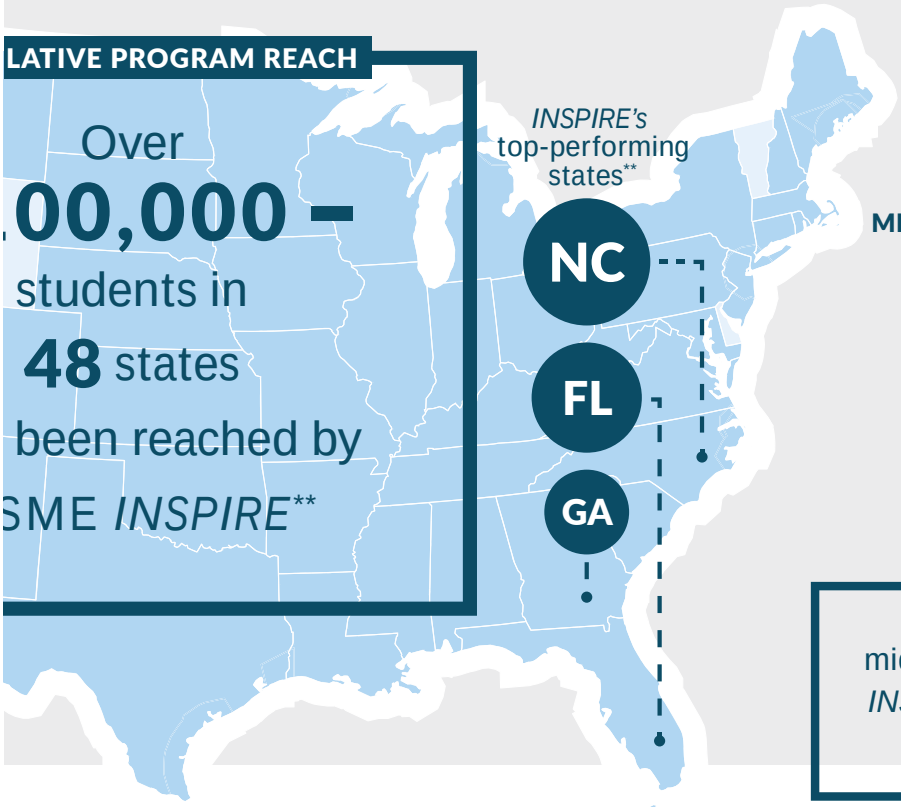


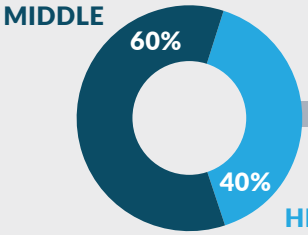
1,034 schools* 108% of goal

A profile of *INSPIRE* schools

LATIVE PROGRAM REACH

Over
00,000 –
students in
48 states
been reached by
SME *INSPIRE***





652
middle schools implemented *INSPIRE* during the 2016-17 academic year

To learn more about *INSPIRE* and ASME K-12 programs, please visit go.asme.org/foundation or email Patti Jo Rosenthal at rosenthalp@asme.org

ASME FOUNDATION

*2016-17 academic year.
**Cumulative program reach from 2014-2017, inclusive of Washington, DC.

Prototypes, Creativity **and Grit:** Students Tackle Future Engineers Challenges

> "It is inspiring to see these two students use 3D printing to innovate something truly unique in space travel," Bell said. "This ongoing **collaboration between the ASME Foundation and NASA catapults our** youth into another realm of science and engineering expertise. I am happy that our platform continues to challenge students to dream big **and think off-planet."**
>
> From Deanne Bell,
> CEO and founder, Future Engineers

Our collaboration with NASA and Future Engineers has launched two challenges this year – Think Outside of the Box and the Mars Medical Challenge – and since 2014, has been the catalyst for inspiring nearly a thousand K-12 students to create 3-D printed solutions for challenges in space.

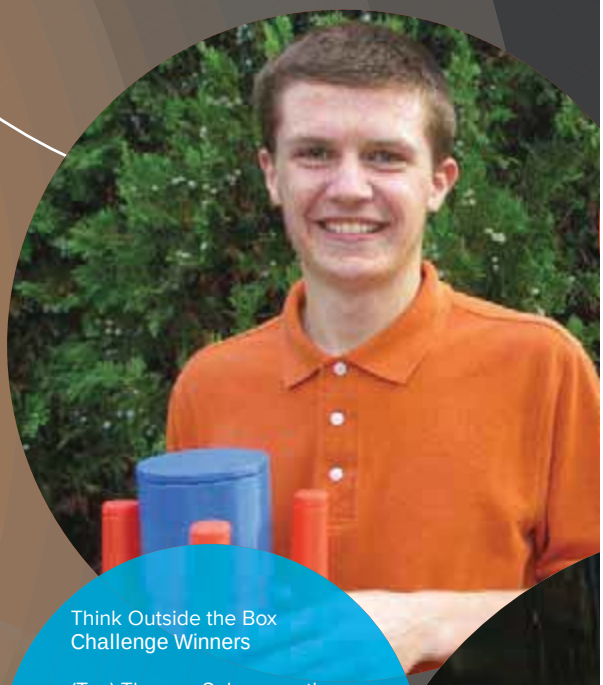
Earlier this year, students were asked to design a 3D printable object that would meet the needs of an astronaut living in microgravity — and would have the ability to assemble or expand to become larger than the 3D printer located **on the International Space Station (ISS). In short, to help astronauts on the ISS** "Think Outside of the Box."

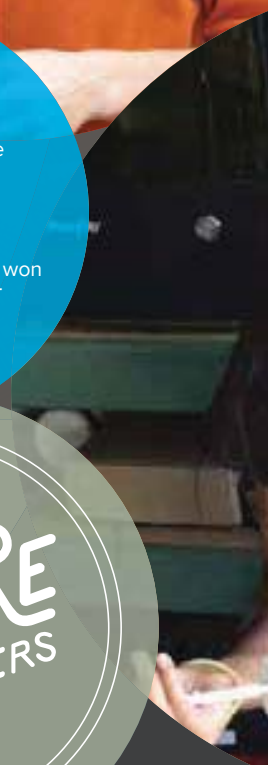
In celebrating the launch of the Bigelow Expandable Activity Module (BEAM) — the first expandable habitat deployed on the space station—students from 26 states created new and innovative answers to potential ISS situations and needs.

A judging panel that included retired astronaut Nicole Stott selected Thomas Salverson of Gretna, Nebraska (winner from the Teen Group, ages 13-19) and Emily Takara of Cupertino, CA (Junior Group, ages 5-12) as the challenge winners. The reward for their ingenuity and promise: a grand-prize trip to Las **Vegas, Nev., for a tour of Bigelow Aerospace — the space technology company that developed BEAM under contract to NASA.**

In October, Future Engineers launched its fifth challenge – Mars Medical – an homage to the movie "The Martian," which asked K-12 students to create a digital 3D model of a medical or dental object that could be used by astronauts to maintain their physical health during a three-year mission to Mars.

Nearly 750 students from 34 states submitted entries, with Lewis Greenstein, an 18-year-old student from Seattle, winning in the Teen Group, and Lauren Lee of Cupertino, California, winning the Junior Group. As the winner of each category, each student received a trip to Houston, where they toured NASA's Johnson Space Center.

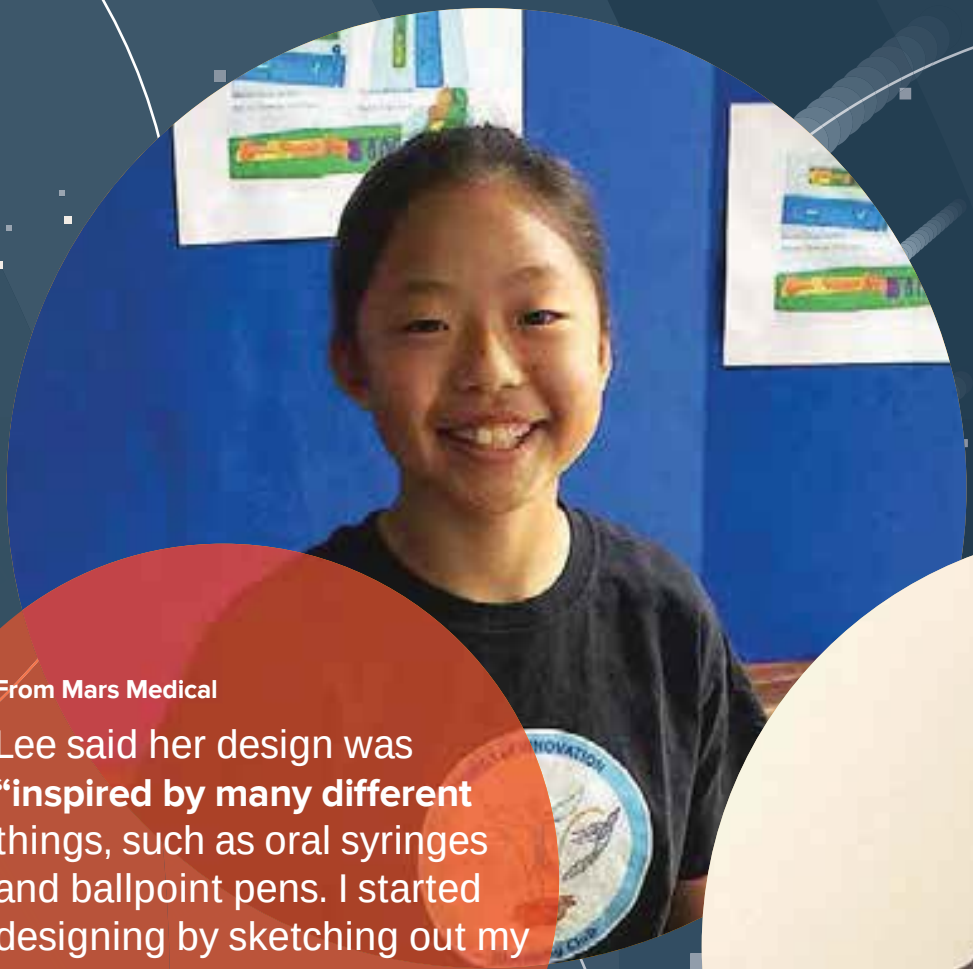




Think Outside the Box Challenge Winners

(Top) Thomas Salverson, the grand-prize winner in the Teen Group, with his entry, Expanding Pod.

(Bottom Right) Emily Takara won the grand prize in the Junior Category, with her entry, Space Anchor.



Mars Medical Challenge Winners

(Left) Lauren Lee of Cupertino, Calif., designed the Drug Delivery Device, which took the top prize in the Junior Category. (Photo courtesy of NASA.)

(Bottom Right) Lewis Greenstein of Seattle placed first in the Mars Medical Challenge's Teen Category with his entry, Dual IV/Syringe Pump. (Photo courtesy of NASA.)

From Mars Medical

Lee said her design was **"inspired by many different** things, such as oral syringes and ballpoint pens. I started designing by sketching out my thoughts and ideas on paper. Then, I started learning new software programs."

From Think Outside of the Box

"**I enjoyed the difficulty of this challenge since it made me think in terms of 'expanding' an object, which was something I had never** considered before when 3D printing," Salverson said. "It took me many prototypes before I had successfully made my completed design, making it all the more rewarding **now that I've been selected as a grand-prize** winner."

"This challenge taught me to persevere and be creative," Takara said. "It has also inspired me to continue designing, as well as teach others computer-aided design."

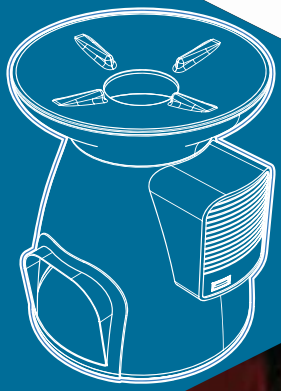
ASME ISHOW Continues to Champion Innovators and Entrepreneurs

Building on its mission of creating a community of innovators and entrepreneurs whose products will have a positive impact on the world, the ASME Innovation Showcase (ISHOW) program selected 28 finalists who took part in this year's ISHOW competitions held in India, Kenya, and Washington, DC.

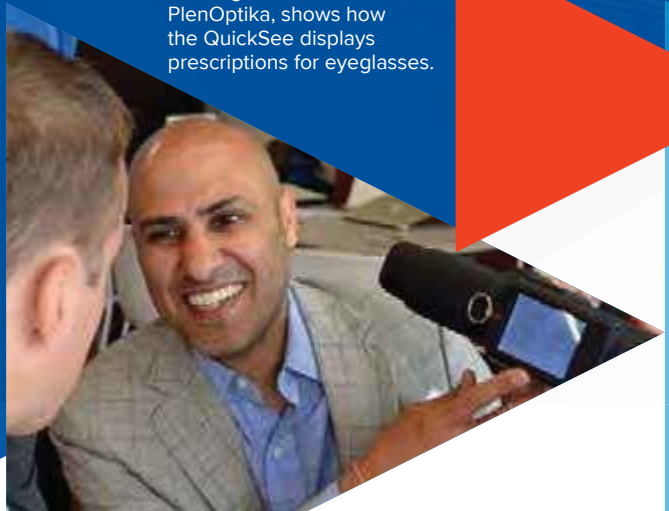
Focused on four evaluation criteria – knowledge of the customer or user; hardware validation and development; manufacturing optimization; and the team's strategy for implementation – ISHOW winners shared in a pool of $500,000 in prizes and received an extensive design and engineering review of their products by a panel of industry experts.

"The unique solutions (of ISHOW innovators) will radically transform and elevate the way their beneficiaries live, allowing them to thrive in ways that were previously impossible," said Keith Roe, president of ASME. "Their display of creativity and ingenuity, and that of their peers, fully embodies the spirit of the ISHOW and exemplifies the potential of tomorrow's engineering problem-solvers and business leaders."

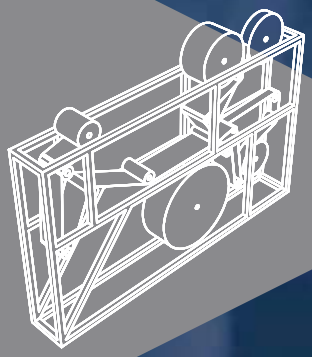
Unique and purposeful hardware-led social innovations included everything from a device for detecting malaria, a portable science lab, a glove that translates sign-language, and cooking and food preservation in low-resource settings.



Shivang R. Dave, CEO, PlenOptika, shows how the QuickSee displays prescriptions for eyeglasses.



IShow Washington, DC winner: BioLite, which makes the BioLite HomeStove, a small cook stove that generates electricity to power a fan for improved combustion as well as to power consumer devices, such as cell-phone chargers. BioLite designs and markets stoves for campers and other users around the world, and also provides cooking and energy solutions in developing regions.



ISHOW India Winner Team Saral Designs and creator of SWACHH, India's first locally designed and manufactured automatic machine for producing high-quality, ultra-thin sanitary napkins, discusses manufacturing optimzation.

"The unique solutions (of ISHOW innovators) will radically transform and elevate the way their beneficiaries live, allowing them to thrive in ways that were previously impossible," said Keith Roe, president of ASME. "Their display of creativity and ingenuity, and that of their peers, fully embodies the spirit of the ISHOW and exemplifies the potential of tomorrow's engineering problem-solvers and business leaders."

2016 Honors & Awards

Celebrating Engineering Achievement

eco nition of an en ineer s or his or her eers is amon the most ratif in of rofessiona achie ements he A onors and A ards ro ram f nded thro h the A o ndation indi id a a ards and endo ment f nds a s tri te to en ineerin achie ement and contri tions to the rofession

J.N. Reddy, Ph.D., distinguished professor, regents professor **and holder of the Oscar S. Wyatt endowed chair, Texas A&M University, College Station, was chosen to receive the ASME Medal, the Society's highest award given in recognition of** eminently distinguished engineering achievement. Dr. Reddy **has been a leader in the field of applied mechanics for more** than four decades and is renowned for his pioneering research and outstanding contributions as an educator and author of **textbooks. His work has had a major impact on engineering** education and practice.

The award was conferred at the Society's 2016 Honors Assembly held in conjunction with the ASME International Mechanical Engineering Congress and Exposition in Phoenix, Ariz.

A resident eith oe resents the A eda to r edd at the 6 onors Assem

ASME MEDAL
J.N. Reddy, Ph.D., Fellow
Texas A&M University

HONORARY MEMBERS
Cristina H. Amon, Ph.D., Fellow
University of Toronto

Ashwani K. Gupta, Ph.D., Fellow
University of Maryland

Shiv G. Kapoor, Ph.D., Fellow
University of Illinois at Urbana-Champaign

ADAPTIVE STRUCTURES AND MATERIAL SYSTEMS AWARD
Ralph C. Smith, Ph.D., Member
North Carolina State University

BERGLES-ROHSENOW YOUNG INVESTIGATOR AWARD IN HEAT TRANSFER
Patrick E. Hopkins, Ph.D., Member
University of Virginia

PER BRUEL GOLD MEDAL FOR NOISE CONTROL AND ACOUSTICS
Patricia Davies, Ph.D., Member
Purdue University

EDWIN F. CHURCH MEDAL
Karen A. Thole, Ph.D., Fellow
The Pennsylvania State University

DANIEL C. DRUCKER MEDAL
Kyung-Suk Kim, Ph.D., Member
Brown University

WILLIAM T. ENNOR MANUFACTURING TECHNOLOGY AWARD
Yusuf Altintas, Ph.D., Member
The University of British Columbia

NANCY DELOYE FITZROY AND ROLAND V. FITZROY MEDAL
Evangelos T. Laskaris, Ph.D.
GE Global Research Center

FLUIDS ENGINEERING AWARD
Patrick J. Roache, Ph.D., Fellow
Consultant

Y.C. FUNG YOUNG INVESTIGATOR AWARD
Triantafyllos Stylianopoulos, Ph.D., Member
University of Cyprus

KATE GLEASON AWARD
Helen L. Reed, Ph.D., Fellow
Texas A&M University

MELVIN R. GREEN CODES AND STANDARDS MEDAL
Bernard E. Hrubala, Fellow
TÜV Rheinland AIA Services, LLC

HEAT TRANSFER MEMORIAL AWARD (SCIENCE)
Brent W. Webb, Ph.D., Fellow
Brigham Young University

(ART)
Raj M. Manglik, Ph.D., Fellow
University of Cincinnati

(GENERAL)
Jayathi Y. Murthy, Ph.D., Fellow
University of California, Los Angeles

MAYO D. HERSEY AWARD
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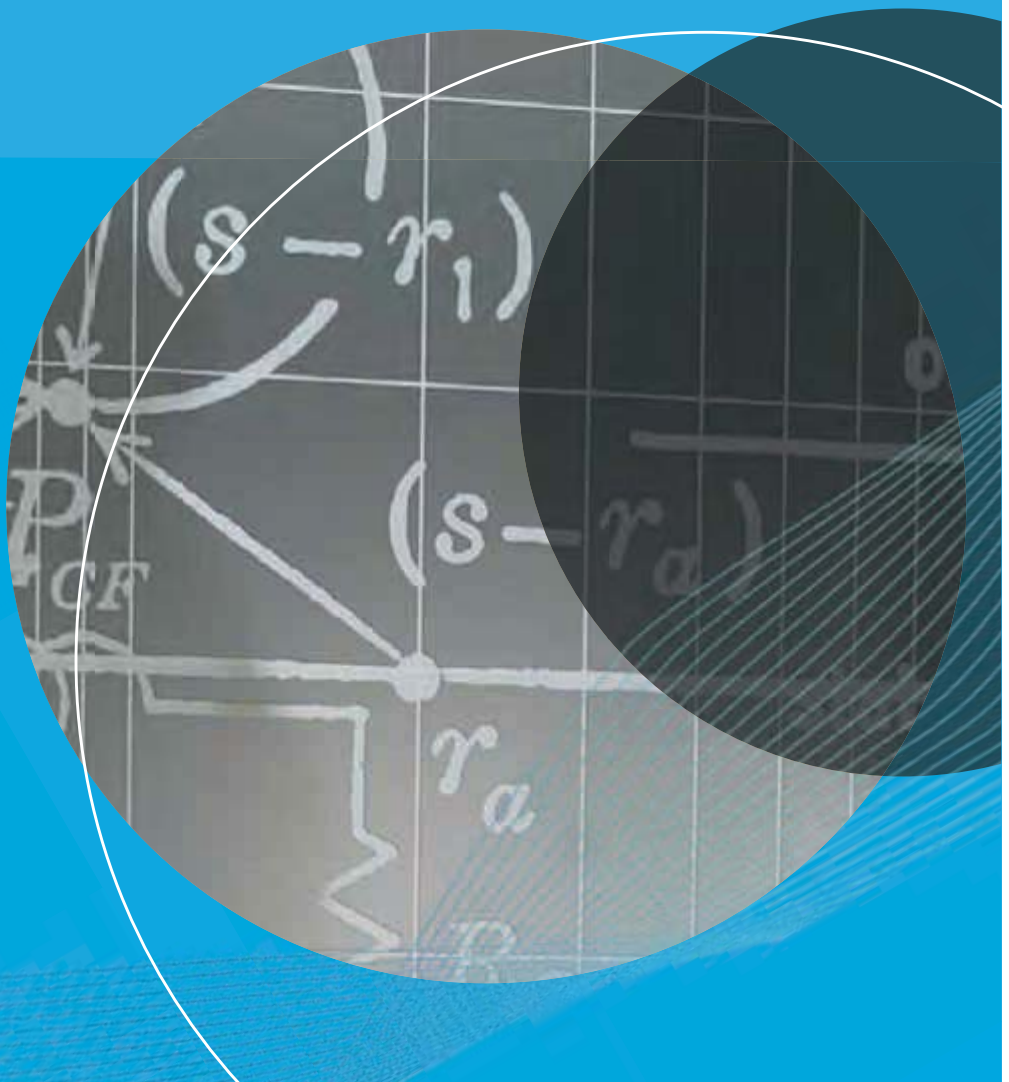

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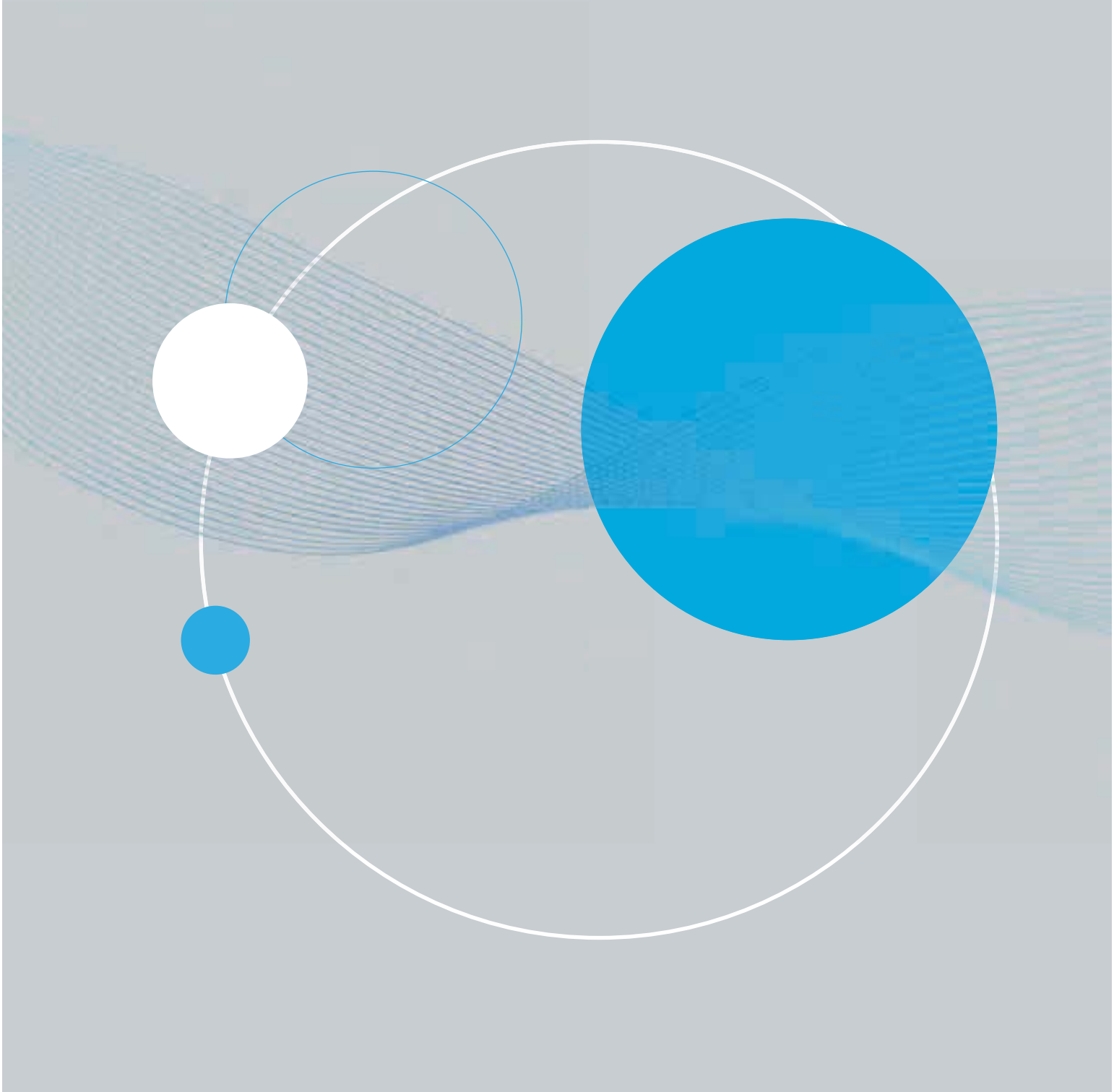

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