“Anticipating what the industry needs.”

– Daniel Twarog, NADCA President
Dear Die Casting Professional:

The NADCA Board and Committees have provided direction and leadership to the die casting industry. The NADCA staff has worked in this direction to find success and relevance in areas of need by the industry. The accomplishments in 2014 in education methodology, research implementation, communications upgrades, and industry benchmarking have been tremendous.

Online training of over 200 hours of technical and managerial topics were introduced to the die casting industry in 2014. Not only were online courses introduced, they were categorized by job function. Also, pre-testing is provided to assess the knowledge of people entering the industry or where current people in the industry need education assistance. The online system was upgraded to include an administrative feature to track the use and accomplishments of everyone in the system from a company. A good portion of the basis of educational subject matter placed in the system is from the steady flow of information being developed from NADCA's research efforts.

NADCA's research relevance has been boosted by the ability of the industry to provide feedback quickly on the results to the researchers so that they can continue to bring the applicability of the effort into the industry. Lube reduction efforts with pulsed spray were demonstrated, as were methods to use additive manufacturing in die repair. Testing of unique alloy compositions and heat treating techniques to improve the yield of existing alloys has seen good industry use. NADCA continues to push for improved die steels, costings and die lube testing. Research is key to staying ahead of the rest of the world.

Producing die castings in one facility and not looking outward has been proven in the past to be detrimental to the advancement of that facility. It is important to understand how one die caster compares to another in all aspects of the operation. In 2014, NADCA facilitated opportunities for the industry to look beyond their walls at technology and products that could help improve operations. NADCA organized the Congress in Milwaukee, with over 1000 people in attendance. It also conducted a tour of die casting facilities in Italy where over 30 die casters participated. Besides the Congress and tours, NADCA conducted surveys of the industry to benchmark their process and financial health. All of this information helps the industry look outwards to compare and improve.

Another major step forward NADCA took in 2014 was the implementation of a new website. It was not only a new look for the industry but more importantly improved the product/service exchange experience between NADCA and its members. The creation of superior products and services is half the battle. The ability to get these things in the hands of industry was improved significantly with the launch and refinement of the new website.

In 2015, we look forward to even more advancements in communications, technical exchange and marketing the industry. NADCA will be launching its news and information link from our homepage which will feature quick audio news bits on trends, forecasts and happenings in the die casting industry. The Congress and Exposition will be in Indianapolis in October. It is the largest die casting event in this region of the world. NADCA will also be marketing the die casting industry to attract people into our industry as we grow and seek more technically skilled individuals. This coming year will see even more changes to NADCA's products and services than were seen in 2014. The new model for an association has to be fast paced and keep up with the trends to provide technology and information to the members they serve.

NADCA resources will continue to be used wisely and we are thankful for the membership support given to the association. My staff and I look forward to working with the industry in providing the quality products and services that make us the premier die casting association worldwide.

Thank you,

Daniel Twarog,
President
North American Die Casting Association

www.diecasting.org/dce
Those Who Lead

NADCA Board of Governors

Eric Treiber, Chairman
Chicago White Metal Casting Inc.

John R. Walker, Vice Chairman
Walker Die Casting Inc.

Doug Harmon, Secretary/Treasurer
Twin City Die Castings

NADCA 2014 Executive Officers & Terms

Andrew D. Behler, 2012–2014
Blue Ridge Pressure Castings Inc.

Paul Brancaleon, 2014–2016
Premier Tool & Die Cast Corp.

Scott Bull, 2012–2014
Pace Industries – Corporate Office

Yeou-Li Chu, 2014–2016
Ryobi Die Casting

Premier Die Casting

Steve Dathe, 2014–2016
A&B Die Casting

Raymond Donahue, 2014–2016
Mercury Castings – Division of Mercury Marine

Fort Recovery Industries Inc.

Shiloh Industries, Inc.

Patrick J. Greene, 2012–2014
Cascade Die Casting Group Inc.

American Aluminum Casting Co.

Custom Alloy Light Metals Inc.

Empire Die Casting

Todd Ikerd, 2014–2015
Auto Cast Inc.

Shiloh Industries, Inc.

Mike M. Jurcic, 2013–2015
Craft Cast Engineering Inc.

Littler Diecast Corp.

Alan Loeffelman, 2012–2014
Production Castings Inc.

Chicago White Metal Casting Inc.

RCM Industries Inc.

Mo-Tech Corp.

Tom Vann, 2014–2016
Visi-Trak Worldwide

ABCO Die Casters Inc.

Robert E. Wilson, 2014–2016
Callen Manufacturing Corp.

A Finkl & Sons

NADCA Staff

Athena Catlett
Advertising & Promotions Manager

Beau Glim
Project Manager

Donna Hutchins
Membership Assistant

Tricia Margel
Director of Information Systems

Andrew Ryzner
Editor

Melisa Ryzner, CMP
Education & Meetings Manager

Daniel Twarog
President

Stephen Udvardy
Director of Research, Education & Technology
Planning for the Future

NADCA Mission

NADCA is committed to promoting industry awareness, domestic growth in the global marketplace and member exposure.

Strategic Areas of Concentration

Chapter Relations:
Foster community and local business relations, attend speaker and networking events, influence both association direction and industry change.

Research and Development:
Identify industry needs and expand funding sources that optimize die casting processes and techniques.

Education:
Present industry knowledge for creating improved die cast parts and processes, incorporating the latest standards and educational curriculum.

Meetings and Expositions:
Provide public and networking opportunities to develop customer relations and position association members as leaders in die casting.

Marketing:
Bring business and engineering focus to die casting as the process of choice.

Membership:
Provide member base with industry news, technical information, promotional activities, networking and referral opportunities and trade events.

Government Affairs:
Foster strategic alliances and increase grassroots efforts to effectively bring industry matters directly to leaders in legislature and Washington.

Globalization:
Assert NADCA’s member die casters’ presence in the global and domestic markets.

Membership – The Association’s Foundation

As the industry’s trade association, NADCA represents a range of companies directly and indirectly involved in the die casting industry including captive die casters, custom die casters, suppliers, OEMs and job shops. Once again the number of NADCA Corporate Members has increased – showing that the industry in bouncing back from the recession in 2008.

Corporate Membership


Despite the growth, the Association did lose 16 Corporate Member companies in 2014, for reasons such as closures, acquisitions, and diminished focus on the die casting industry.

We are pleased to report that Individual Membership was on the rise in 2014. This year we saw the highest membership numbers since 2008. While we have a ways to go to grow membership numbers to where they were before the recession we are confident that as we continue to integrate more technologically advanced services membership will increase. NADCA continues to utilize Facebook, Twitter and NADCA Apps, as well as the Membership Plus program to appeal to the Generation X and Yers.

Individual Membership

NADCA’s Membership Plus program reached its two year anniversary in May 2014. The program is a membership upgrade that offers quarterly webinars, downloadable technical publications, engineering calculators and an online technical community for interacting with other North American-only engineers. In 2014 Membership Plus launched the Online Gating App, the PQ2 App as well as the Greenhouse Gas Calculator.
NADCA Chapters – Membership at a Local Level

NADCA membership and resources are represented across the country through the efforts of its 15 active area Chapters. The regional Chapters hold local meetings, host social events and organize plant tours. Active chapters are located in:

- 3 Michigan
- 5 Chicago
- 6 Cleveland
- 7 New York
- 9 Central NY
- 10 Ontario
- 12 Wisconsin
- 14 S. Ohio
- 15 Southeastern
- 16 Minnesota
- 17 St. Louis
- 25 Indiana
- 29 South Central
- 30 Los Angeles
- 39 SW Michigan

NADCA staff strives to reach every chapter across country in order to present the current state of the industry at chapter meetings, as well as the benefits of NADCA membership. Staff successfully visited all 15 Chapters with over 350 attendees collectively. Chapter 7 and 17 held NADCA training webinars for their members. Additionally, Chapter 3, Chapter 25 and Chapter 29 hosted live NADCA training events. Chapters receive a special rate for hosting NADCA training and in turn, may charge their attendees what they feel is a reasonable price for courses. Some chapters even offer free courses to any card-carrying member.

Hoping to spur on membership interaction and education, NADCA provides its chapters (in good standing) a rebate program, based on total membership. In the past, funds were held in an account at NADCA to be applied for educational courses. However, the Membership & Chapter Relations Committee decided in 2013 that the use of the credit should be expanded to include more NADCA products and services. In 2015, NADCA will work with chapters to help them utilize their credits through these various outlets by providing coupons codes that they can apply to qualifying areas such:

- A Chapter In-Plant Course.
- Events include live webinars, national education courses and conferences.
- Orders include publications and courses through NADCA’s Online Education System.

Instructor of the Year
Dr. Stephen Midson
The Midson Group

Emphasis On Education
Nemak Wisconsin
Sheboygan, Wisconsin

Technical Committee Member of the Year
Dr. David Schwam
Case Western Reserve University

Best Congress Paper
Venting Design and Process Optimization of Die Casting Process for Structural Components: Part II
Venting Design and Process Optimization
Dr. Changhua (Joshua) Huang
EXCO Engineering

Herman H. Doehler Award
Jack R. Vann
Visi-Trak Worldwide

www.diecasting.org/dce
Publications – Improving the Industry’s Knowledge

NADCA introduced several new and revised publications and software in 2014 that will continue to spread information and technology that is being developed. The following publications are new in 2014 and are currently available for download in NADCA’s bookstore:

- Die Cast Machine Study - Download (PUB-858)
- Wage & Benefit Survey - 2014 (PUB-852)
- Annual Financial Survey - Fiscal Year 2013 (PUB-854)
- Die Casting Benchmarking Study 2014 (PUB-862)

Webinars – A Travel-Free Option for Education

In 2014 NADCA continued to offer more webinars than ever before! This webinar program provides additional opportunities for individuals to obtain information without the hassle or cost of travel. In 2014 NADCA hosted over 120 webinars – that is doubled from 2013. Attendance for these webinars continues to be overwhelming, with roughly 1374 registrants recorded in 2014. It is also important to note that because webinars are convenient for group viewing that the number of actual views is much higher than the registered amount.

Of the webinars presented in 2014, 60% were new topics. New webinar topics included: Advanced Operator Training (8 part series), Die Casting in Europe (3 part series), Die Design and Process Control (18 part series), Die Casting Problem Solving (2 part series), Introduction to Zinc Die Casting (2 part series), Introduction to Magnesium Die Casting, Process Control (3 part series), Refractories for Aluminum Furnaces, SMED (3 part series), Aluminum Metallurgy (3 part series), Semi Solid, Structural Die Casting (5 part series) and many more.

Webinars continued to be viewed as an excellent means of obtaining information in a convenient setting. In 2014 all of NADCA’s webinars have been integrating into NADCA’s Online Education System. Although an individual can no longer purchase a downloadable copy of the presentation or recording all previously run webinars can be accessed through the Online Education System. Purchasing access to an individual course through the system gets you access to the recording, presentation, support material and quiz for one year. New webinars are made available through the Online Education System within one week of their air date. To view all courses available visit the NADCA Marketplace and search “online education”.

NADCA currently has over 80 webinars scheduled for 2015 with additional topics being added frequently. These 60 minute presentations not only address vital information on the topic but also provide adequate time for questions, answers, and discussion. NADCA looks forward to another rewarding year of webinar participation and is excited to be offering constant education via this easily accessible medium. To view or register for upcoming webinars just visit, www.diecasting.org/webinars.
Meetings & Conferences – Networking With Your Peers

In 2014, NADCA conducted the Executive Conference, Plant Management Conference, Metalcasting Industry Government Affairs Conference, Die Casting Congress & Tabletop and led a delegation to northern Italy.

The Die Casting Executive Conference was February 23-26, in Marco Island, FL at the Marco Island Marriott Beach Resort, Golf Club & Spa. The annual conference was a three day event that featured presentations on the changes in healthcare, results from the 2014 Benchmarking Survey, workforce education and a panel on metal indexes. NADCA held a spouses luncheon and a golf outing during this conference. Both events were successful. The conference was well attended by both die caster and supplier executives.

The 2014 Plant Management Conference was May 21-23 at the DoubleTree Suites Hotel Charlotte - SouthPark in Charlotte, NC. Special presentations included die casting cell control, new die materials and die casting education. Cascade Die Casting hosted a plant tour for attendees.

In 2014 the North American Die Casting Association (NADCA) hosted our Government Affairs Briefing in conjunction with the National Association of Manufacturers’ (NAM) 6th Annual Manufacturing Summit. The summit took place June 10-11 at the Renaissance DC Downtown Hotel in Washington, D.C. Conference participants had nearly 100 meetings with lawmakers and key staff. Pertinent issues such as concerns regarding the new energy, EPA regulations, tax reform, and several other issues that are important to the die casting industry.

The Die Casting Congress & Tabletop was held on September 22-24 at the Wisconsin Center in Milwaukee, WI. The tabletop was met with great interest from the die casting industry. Sponsored solely by NADCA, the event attracted 145 exhibiting companies and over 1,000 attendees. An analysis of the registrants found more than 255 unique companies attending (after the 145 exhibiting companies were subtracted from the list). The papers and presentations exposed a variety of new technologies, case studies and success stories. The topics included advanced technologies, die materials, computer modeling, cast materials, die welding, equipment and process control, machine & equipment, die surface and injection systems & tooling.

In 2014, NADCA led a delegation of die casters and suppliers to northern Italy. October 19-25 attendees stayed at the Grande Hotel Terme in Colombare di Sirmione, Italy. The delegates visited 13 different Italian facilities. They viewed many new and interesting processes.

**Aluminum Die Casting Over 10 lbs**
David Sucese, Corey Beechboard, Shawn Glass, Danny Graham - Chrysler - KCP
*Part: RWD Transmission*

**Structural Casting: Aluminum Under 1 lb**
Stephane Beaulieu, Simon Desrosiers - AMT Die Casting
*Part: Right/Left Hand Bracket*
The marketing of die castings to the designers and purchaser continues to be at the forefront of the NADCA Marketing Committee. In 2014 the Marketing Committee’s activities included programs to increase the number of leads generated for NADCA Corporate members and well as educate designers on the die casting process. In the spring and fall of 2014 NADCA hosted a Die Casting Design webinar series sponsored by Chicago White Metal Casting Inc, DECO Products Company LLP, Technical Die Casting Inc, Rheocast Company, Simalex and Madison-Kipp Corp. This series was promoted to a purchased list of OEMs and generated over 270 leads in the fall of 2014 and over 160 lead in the spring.

NADCA also began the process of updating the Capabilities Directory. In 2015, NADCA will be designing and distributed a printed version of this directory highlighting information NADCA Corporate Members. These printed directories will be made available to OEM’s in order to help them better select a die caster that meets their needs. As always, the searchable Online Capabilities Directory provides information on all die casters in NADCA’s database.

The NADCA Marketing Committee has been extremely vocal this past year about the need for skilled workers. NADCA and its members strived to support National Manufacturing Day (MFG Day) this past October. MFG DAY addresses common misperceptions about manufacturing by giving manufacturers an opportunity to open their doors and show, in a coordinated effort, what manufacturing is — and what it isn’t. Showing students that manufacturing is a career worth perusing is obviously the first step in securing qualified workers for the future. NADCA is also working on attracting people with work experience in other areas of manufacturing into the die casting industry.

The Die Casting Design Website continues to be an excellent source of information for those looking to find more information on the die casting process and designing part. Over 47,000 pageviews were made from purchasers and designers of die castings. The website provided guidance on technical questions, where to find the right die caster, and common design standards for the industry.

NADCA also organized the International Die Casting Competition. Winning castings were displayed prominently at the 2014 Die Casting Congress and Tabletop in Milwaukee, WI. Since 1972, the competition has featured the top designed die castings annually. Nine winners in various categories were selected. Numerous publications and journals have requested information on the winners making this a great tool for the industry as well as an excellent marketing tool for the winners. For more information on how to compete in the 2015 International Die Casting Competition, please visit www.diecasting.org/castings/competition.

We continue to distribute press releases to our database of media contacts to draw attention to the die casting industry. Such releases include Industry Scholarships, Safety Award Winners, Die Casting wages, Industry conditions and NADCA’s ongoing work with The Franklin Partnership, who represent our interests in Washington. The Die Casting Design newsletter, which is distributed to over 5000 designers twice a month, is yet another way NADCA informs the design community of die casting related news, opportunities and advancements.
Monthly Resources – DCE, LINKS, & eNewsletters

Die Casting Engineer (DCE) magazine is distributed to all Individual Members, Corporate Members and subscribers. In 2014, more than 17,000 copies of Die Casting Engineer were in circulation, with an average of 2,400 people receiving each issue.

The magazine’s purpose is to act as a vehicle to promote the industry. It does so by featuring upcoming educational courses, conferences, industry news and technical articles submitted by the industry’s leading educators, scientists and suppliers. The past year featured numerous technical articles throughout the six issues. The themes for 2014 included die casting components & equipment, die materials, SSM/squeeze casting, defects, die coatings & surface treatments, and aluminum.

DCE has its own web site, located at www.diecasting.org/dce. The web site is designed for ease-of-use and to be very user-friendly. The site is accessible through NADCA’s main web site through a link at the top of the page.

Die Casting Industry LINKS finished its twelfth and final year of publication for Corporate Members only and continued to provide a diverse content to satisfy the needs of many different levels of upper management, sales and marketing departments, as well as presidents and CEOs of die casting companies and suppliers.

Because the magazine only targets these individuals — the key contacts of all NADCA’s Corporate Member companies — much of the information is very sought-after and is available only to these companies. Recipients of LINKS look forward to the State of the Industry Report, in-depth industry marketing updates, Wage & Benefit Survey results, Financial Survey results and many other features stories addressing ways to improve a company’s bottom line. A large portion of LINKS content is derived from NADCA staff and another portion comes from business consultants, some involved with the industry and some from outside the industry.

NADCA also regularly sends out its own eNewsletters. The NADCA Update eNewsletter is sent to over 9,000 different people weekly. The eNewsletter updates its recipients on news in the industry, news from NADCA, upcoming conferences and meetings, and new products and publications. It is a great way to easily stay connected to the die casting industry.

Magnesium Die Casting Under .5lbs
Pace Engineering & Operations - Pace Industries - Product Tech.
Part: SAWZALL Gear Case Assembly

Magnesium Die Casting Over .5 lbs
TCDC Engineering Department and TCDC Monticello Plant - Twin City Die Casting Company
Part: Magnesium Part

Structural Casting: Aluminum Over 10 lb
Eric Kind, Alex Reikher - Shiloh Industries
Part: Rear Node

Images withheld at the request of the customer.
Research & Technology – Maximizing Productivity

At the start of 2014, there were 13 projects in the research portfolio with a total leveraged value (direct funding plus cost share) of approximately $3,500,000. During the year, four new projects were initiated and four projects were completed, maintaining 13 projects in the portfolio. Due to the difference in the value of the completed projects and the newly added projects, the total leveraged value of the portfolio increased to approximately $3,800,000 by the end of the year. The projects initiated during the year were: Methods for Evaluation of Die Lubricants used in Aluminum Die Casting, a NADCA funded project; Evaluation of Pulsed Spray, a NADCA funded project; Characterization of T5 Heat Treating of 360 Die Castings, also a NADCA funded project; and, Roadmapping for the Metalcasting Industry, a NIST (National Institute of Standards and Technology) funded project. The NIST project is the result of a joint proposal submitted in 2013 through AFS. The projects completed were: Laser Engineered Net Shaping (LENS), the final DoE/CMC Energy-SMARRT project; Characterization of T5 Heat Treating of 360 Die Castings, a NADCA funded project; Effect of Slow Cooling Rate on Impact Strength of Superior Die Steels, a NADCA funded project; and, Evaluation of Candidate Coatings, also a NADCA funded project.

The increase in funding level this year is primarily due to this new NIST project. Sources of funds in addition to NADCA and NIST for the current projects include the Department of Defense (DoD) through the Defense Logistics Agency (DLA) Troop Support, Philadelphia, PA, the DLA Logistics Operations, J335, Research & Development, Ft. Belvoir, VA, and the American Metalcasting Consortium (AMC); and America Makes (AM), formerly NAMII (National Additive Manufacturing Innovation Institute).

2014 Accomplishments – New technical webinars were developed and presented in 2014 including a 5-part structural die casting series, flash-free die casting, a 3-part aluminum metallurgy series, and a 2-part SMED series. Three workshops were provided in 2014, two of which were on additive manufacturing related to the America Makes project on repair and re-use of die casting dies, and one of which was on porosity management based on the webinar series developed in 2013. Membership Plus also offered exclusive webinars. The NADCA Special Quality Die Steel and Heat Treatment Acceptance Criteria for Die Casting Dies document was revised to clarify tempering temperature tolerances and to add two additional steel manufacturer grades (one Sanyo and one Arcelor Mittal). The 2015 Research & Development Strategic Plan and Roadmap Overview was published in the July issue of DCE Magazine. Transaction papers and presentations from the 2014 Die Casting Congress were published online. The 2015 Product Specifications Standards for Die Castings was prepared by year end for release in early 2015. NADCA initiated its participation in two national networks for manufacturing innovation that were formed early in the year. The first is ALMII, the American Lightweight Materials Manufacturing Innovation Institute, and the second is DMDII, the Digital Manufacturing and Design Innovation Institute. Lastly, two proposals and two whitepapers seeking government funding for projects were prepared. One proposal on design for manufacturability was submitted to DMDII through Iowa State University and is in the selection stage. One proposal was submitted on an expanded safety training program for full-time and part-time die casting employees in response to a Susan Harwood Grant solicitation. This proposal was not selected for funding. A whitepaper on thin wall aluminum structural die castings was submitted to ALMII and a whitepaper on high performance castings was submitted to the DoE by ATI/SCRA on behalf of the metal casting associations.

The 2014 Die Casting Congress – There were 602 registrants for the congress portion of the Die Casting Congress and Tabletop, up 60% over last year’s attendance! There were 11 congress sessions, all being well attended with an average of over 70 per session and a few sessions exceeding 100 attendees. Session topics included cast materials, die materials, computer modeling, advanced technologies, quality and process control, and machine and equipment technologies. A special format session, with success stories and a panel discussion, was held on additive manufacturing for dies. All considered, the Die Casting Congress was a great success and a wealth of technical information was transferred to the attendees.

Note: Contributions to the above have been made by the technical committees and task forces.
In the first quarter of 2014, NADCA launched its new website. The website now features a tighter integration with the database at headquarters. This provides several areas of the website to now be automated with our database, including individual membership processing and calendar events. Members will notice that areas of the website unlock based on membership level when one is logged in.

The NADCA Marketplace was updated to combine all the previously separate commerce areas of the website into one central location. At the Marketplace, one can renew their dues, purchase a book, and register for a webinar and/or conference in one single transaction. Books are immediately available for download after purchase. Previous webinar participants will notice that the registration process for webinars has been simplified. Employees can now also register additional employees at the same company. NADCA now periodically offers its members coupons for the Marketplace, for everything from discounted membership to free webinars. The Marketplace search has been enhanced and searches all of NADCA’s products and offerings. Another convenient new feature is that the marketplace allows you to print and/or email a previous confirmation or invoice at any time.

NADCA released a new PQ2 application and Greenhouse Gas Calculator to NADCA Membership Plus members in 2014. The PQ2 program is designed to assist die casters, die builders and part designers to optimally match the casting, machine and process based on design requirements. The Greenhouse Gas Calculator provides the carbon footprint of the facility using data entered by the user.

NADCA has been working to develop a new section called NADCA Video News & Information since late 2014. With Video News & Information you are just one click away from interactive news and information in the die casting industry. You will find frequently updated videos addressing a variety of industry and government-related topics.

NADCA’s Online Education System was launched in 2014 and offers over 180 hours of training and the convenience of taking courses anywhere with the ability to complete courses at your own pace. NADCA’s new Online Education System integrates NADCA webinars as well as previously offered online courses. This system grants purchasers one year of access to the course presentation, recording, support material and test when applicable. More information on this new service can be found in the Education section of this report.

2014 also saw the launch of several communities on the NADCA website. These areas are online forums that lets a group collaborate on projects, share knowledge, communicate and connect with others, and stay in touch using email subscriptions. Transactions from the 2014 Congress have been placed into a community, as well as OEM lead reports. This ongoing project will continue to expand in 2015.

**Safety, Energy & Environment**

**New Projects** - 2014 saw the start of three new projects for Safety, Energy & the Environment. NADCA has partnered with two die casting facilities to define the Energy Star Energy Treasure Hunt process for use in die casting plants. The goal of this project is to detail, through experience, the process of running an energy audit and energy savings hunt at a die casting facility and providing lessons learned to make this process easier for other die casters. The Energy Treasure Hunt was initially developed by the EPA for use in general industry and is being tailored for the die casting industry.

NADCA is also working with Energy Star to test and refine the Aluminum Energy Performance Indicator software program. The energy performance indicator program will allow die casters to compare the energy efficiency of their facility to the rest of the industry. In its current state however, the software is not as die casting friendly as it needs to be. For instance, it does not segregate secondary operations and facilities that purchase molten metal, thereby skewing the results. The refinement is correcting these types of issues. A business continuity plan document has been created by Kestrel and posted on the NADCA website. NADCA is developing a document to describe the process of partnering with another die caster to set up a backup facility in case of a disaster.

Two updates to existing products were started in 2014. The NADCA greenhouse gas calculator has been updated and loaded onto the Membership Plus website. Safety training is in the process of being expanded with information on arc flash and falling from heights. Existing information is being updated. New webinars will be presented in the middle of 2015.
Opportunities for Interns — Scholarships

The David Laine Intern and Scholarship Program was established in 1975, and requires that students complete an internship or co-op at a die casting company or a supplier to the die casting industry prior to applying for the scholarship. The prerequisite allows students to experience hands-on training in the die casting industry, with the hope that the learning experience will encourage students to continue on in the field after graduation. In 2014, NADCA recognized 21 students through the David Laine Intern and Scholarship Program. This is the highest amount of students that have been recognized in one year since the program’s inception, as well as the largest overall award given, with the scholarships totaling $50,250.

Scholarship winners cited experience gained in areas such as die casting machine re-builds, process development, quality engineering and die maintenance on their application essays. To learn more about 2014 winners, their studies and the projects they were involved, NADCA encourages you to visit: www.diecasting.org/scholarship/laine. There, one may also find information about how to apply, and steps to support the growth of this program. The scholarships provided by the Laine Fund are supported entirely by contributions and pledges from the die casting community.

The Steven J. Harmon Scholarship Program was established in 2005 by family members of Twin City Die Castings Company as a memorial to the company’s long-time leader and president. The scholarship program is administered by NADCA and recognizes Harmon’s 29 years of service to the family company and the die casting industry. Throughout his career, Harmon served on various industry boards, was an active committee member, had a strong voice in the die casting industry, and made numerous other time and financial contributions. His strongest characteristic was his heartfelt passion for the business.

The objectives of the scholarship program are: to stimulate an awareness and interest in the die casting industry; to provide financial assistance to a graduate student interested in a career in the die casting industry; to promote die cast technology through engineering education; and, to further education in the die casting industry. In 2014, the program awarded a $2,500 scholarship to Sean M. Kelly, a student at the Worcester Polytechnic Institute. Kelly exemplified the diversity of a Harmon Scholarship candidate and was commended for the work he is doing with a consortium of companies on recycling scrap aluminum requiring a single melt. For more information, on scholarship opportunities, visit www.diecasting.org/scholarship.

NADCA congratulates the following students, universities and employers for their commitment to the die casting industry.

Steven J. Harmon Scholarship Program Winner:
Sean M. Kelly, Worcester Polytechnic Institute

David Laine Intern and Scholarship Program Winners:
Mark Boemker, University of Dayton - Honda Engineering North America, Inc.
Jack Bossong, University of Illinois Urbana-Champaign - Aalized Die Casting Company - Franklin Park
Christopher Carberry, University of Illinois at Urbana-Champaign - Dynacast, LLC.
Jacob Cicero, University of Alabama at Birmingham - Nemak Alabama
Austin Cline, Western Michigan University - Industrial Innovations Inc.
Katie Demaree, Rose-Hulman Institute of Technology - Madison Precision Products
Justin Hansen, Western Illinois University - Twin City Die Casting Co.
Craig Hart, Wright State University - Fort Recovery Industries Inc.
Matthew Isola, University of Wisconsin - Madison - RCM Industries Inc. - Inland Die Casting Company
David Kemmenoe, Cornell University - Fort Recovery Industries Inc.
Michael Korn, The Ohio State University - RCM Industries Inc. - Inland Die Casting Company
Edward Kretch, Southern Illinois University - Carbondale - Spartan Light Metal Products, Inc.
William McKone, University of Wisconsin - Platteville - Minneapolis Die Casting LLC
Brendan Melnick, Purdue University - Chicago White Metal Casting, Inc.
Amelia Pierson, The Ohio State University - Rimrock Corporation
Thomas Ring, Tennessee Technological University - Walker Die Casting, Inc.
Vincent Ruedinger, University of Wisconsin - Madison - Mercury Marine
Joseph Schwartz, University of Illinois Urbana-Champaign - Inland Die Casting Company
Wilson Spivey, University of Tennessee at Martin - Walker Die Casting, Inc.
Andrew Storlie, Luther College - Deco Products
Tyrell Whitefoot, Central Community College - Nebraska Aluminum Castings, Inc.

$50,250 Awarded to 21 Students
Education – Growing Online Attendance

In 2014 we saw a slight increase in instructor-led education activity. An abbreviated schedule was run in the Spring and Fall for National Courses. National, Chapter, In-Plant, In-House and Train-the-Trainer attendance in 2014 totaled 868 students for 34 course offerings extended by NADCA. Twelve national courses were taught with 85 students, six Chapter courses with 93 students and 47 In-Plant courses with 643 students. The In-House Program was completed by 47 students at two facilities. NADCA licensee Southwestern Michigan College (SMC) continued to suffer in 2014. Not a single NADCA course typically offered through SMC was offered in 2014 due to lack of attendance. Therefore, the grand total for 2014 attendance was 868 as compared to 2013 attendance of 730, 2012 attendance level of 628, 2011 attendance level of 950, 2010 attendance level of 404, and the 2009 attendance level of 449.

A new online education system was launched in 2014. The system uses webinars and existing online courses to make up its catalog of over 185 hours of training. A course in the online education system includes a recording of the course, the .pdf of the presentation, any applicable books to support the course and a test. Courses are sold either in training blocks to companies (available for corporate members only), and job kits or individual courses to individuals in North America. Since the launch of the online education system there have been 33 training blocks sold, 22 job kits sold and 1,037 individual courses sold. This has been a vast improvement over our previous online education system.

Online and In-Plant courses showed the largest increase and reached the largest number of individuals. The overall incline in activity was due to the improved state of the economy. With the economy and state of the industry projected to recover even more in 2015, attendance is expected to continue to recover as well.

Webinars have continued to increase in attendance in 2014. We launched webinars in 2011 and they have grown at a rapid rate since then. These hour-long presentations typically run every week and cover topics many topics. Around 1,374 people attended webinars in 2014 compared to the over 960 people attended webinars in 2013.

Surveys & Statistics – Vital Resources

In 2014, NADCA conducted a major survey on benchmarking all aspects of the die casting operation. The results of this survey have been viewed and used by over two hundred companies.

NADCA also conducted an industry Financial Survey which identified the cost ratios/sales of die casting operations and mapped profitability in the industry. The customized survey results showed the ratios of each participant and where they were in relation to the rest of the industry.

The annual Wage survey was conducted and had over 50 die casting facilities providing wage and benefit data. One of the survey results revealed that the average die caster should be shipping $165,000 worth of castings per person. The top performer was over $300,000 per person. As productivity and automation in the industry increases, so will this number.

In addition to the major surveys, NADCA has a corporate member service that explores interesting facets of die casting operations called NADCA quick surveys.

Seven NADCA quick surveys were conducted in 2014 and the results answered questions on the percentage of healthcare costs to sales to what is typical in terms of operating shifts in the industry. Survey participation ranged from 30 to 60 die casting operations providing information/data for the surveys. The surveys conducted in 2014 were as follows:

- Warranty Survey
- Process Survey
- Health Insurance Survey
- Accounting Practices on Tooling Survey
- Operating Shifts Survey
- C-TPAT Survey
- Indemnification Survey

This coming year, NADCA will continue to post quick surveys and conduct its annual Wage & benefit survey. Additionally planned in 2015 will be non-automotive end market assessment survey. We hope every die caster will participate in all these surveys because the value of the results is directly proportional to the level of responses.
Government Affairs

The Franklin Partnership
444 North Capitol Street, NW
Suite 605
Washington, D.C. 20001
P: 202.393.8250
F: 866.876.9163
franklinpartnership.com

Representing NADCA Members by:

• Providing timely information on federal legislation, laws and regulations that impact die casting operations.

• Advocating on die casting issues before Congress and key federal agencies.

• Educating Congress and federal agencies of the impact their decision-making has on the die casting industry.

• Arranging for lawmakers to tour die casting plants.

• Host the annual Government Affairs Briefing in Washington, D.C., arranging for die casters to directly lobby members of Congress on critical issues.

• Alerting members on important Emerging Issues and Opportunities.

• Writing columns and articles regularly in both the Die Casting Engineer and LINKS magazines on industry matters, federal issues and programs.

NADCA Government Affairs – Our Voice in Washington

In 2014, NADCA continued its relationship with The Franklin Partnership (TFP) to act as NADCA’s representation in Washington, D.C. They are tasked developing Congressional connections for NADCA members among other items, including eNewsletter articles, a section in Die Casting Engineer magazine, and a bi-weeklyVideo News Update coming in 2015.

The Franklin Partnership (TFP) is a bipartisan, Washington, D.C.-based government affairs consulting firm specializing in representing small, medium sized, and middle market manufacturers before Congress, the White House, and Federal Agencies. You can read more about The Franklin Partnership by visiting www.franklinpartnership.com.

NADCA’s views and positions are most important in the direction being taken by OSHA and EPA on host of topics which directly and indirectly impact our industry. NADCA has continued to give OSHA-related webinars on PPE, noise, reporting, and general handling the situation if “OSHA comes knocking.” Webinars continue to be a popular way for NADCA to communicate with and educate its members and the industry as a whole. NADCA has continued to engage Kestrel Engineering in developing articles for our magazine(s) on topics which will help our industry understand what OSHA is emphasizing and how to prepare your facility. Similarly, NADCA is working to bring the same level of service on EPA issues. NADCA also brought the issues to Washington, D.C. in their industry specific briefing.

NADCA has been historically successful in obtaining funds for pre-competitive technology development that has resulted in changing the die casting industry. More research is needed and NADCA continues to educate the administration’s offices on how die casting technology development would help advance the goals of the nation.

Look for more of this focused activity of EPA monitoring, OSHA reporting and research needs education being conducted in 2015. NADCA needs good stories from the industry and the people in industry to come to Washington, D.C. to tell their stories. NADCA urges its members to go to Washington, D.C. June 2-3, 2015 to allow your voices to be heard at the Government Affairs Washington Briefing. NADCA Chairman Eric Treiber, President & CEO of Chicago White Metal Casting, Inc. has been attending the conference for years and calls it one of the most rewarding activities he participates in with NADCA.

NADCA spends almost 10% of the member dollar on Washington activities. This is a large percentage of your dues. Make that expense pay dividends, get involved in our Washington efforts.
Bottom Line – Financial Standing

NADCA continues to be a membership driven organization. In 2014, NADCA’s revenues and expenses ended to be slightly revenue positive by ~$120,000. The revenues versus expenses in the various product and service areas of NADCA are charted below. You can see from the chart that NADCA continues to invest in research, marketing and education for the industry, despite it being a net expense.

NADCA gained ground on its investments due to the leadership of the Finance Committee and modest gains in the stock market. NADCA’s investment policy is very conservative and helps to guard NADCA against future down markets.

In 2015, NADCA forecasts a stronger revenue positive position due to the Exposition which will be held in October. These gains have helped fuel additional member services and programs. The NADCA Board has already committed to additional research funding and educational program development with the excess revenues.

2014 NADCA Revenue & Expenses

- Launch Video News & Information Website
- Printed Capabilities Directory
- 2015 Die Casting Congress & Exposition in Indianapolis, IN
- Marketing Conference
- Plant Management Conference with Tour of Tesla Motors
- Company Administration of Online Education System
- Research Results on Laser Welding, Pulsed Die Spray, Heat Treating 380, and More
- Pilot Program to Recruit Technicians into Die Casting
- Marketing of Die Casting as an Advanced Manufacturing Industry