Providing the Resources for Success in the Die Casting Industry

– Daniel Twarog, NADCA President
Dear Die Casting Professional,

I have been in the metalcasting business since 1978. I tell you this not to show my age, but to inform you that I have personally experienced the many downturns in our industry from the late 1970s to today. Last year, 2009, was by far the worst downturn that I have ever been part of. Industry employment was cut by more than 35% and we lost close to 5% – 8% of our productive capacity in that year alone! That’s the bad news. There is good news too.

NADCA continued to provide the same programs and services that it has built for the industry over the last 20 years. We did this without cutting out anything because the NADCA Board saw the development of our meetings, products and information as vital to maintain for the industry, despite the economic conditions. NADCA quietly celebrated its 20th year by working with the industry in the most difficult economic times possibly since the 1930s.

NADCA created networking opportunities to the industry across the U.S. with its conferences and educational workshops and courses. We further developed networking by electronically linking the industry through our executive e-Question service and enabling our Web site with social networking tools such as Facebook, Linked-In and Twitter. The Web site also was updated and modernized to allow you to be only two clicks away from any type of information you were seeking. We also expanded our networking to die casting customers with the expansion of a design-oriented Web site and e-Newsletter. Technical marketing has been our focus, and communications between the designer and the industry, through NADCA, has never been greater. Many Corporate Members benefited from this service by being placed on the shortlist of preferred suppliers to the inquiring designer.

NADCA was also successful in seeing many of its research programs develop implementable savings in energy, emissions, die costs and cycle times. We began an ambitious effort to develop magnesium composite materials in the HyperCAST research program. These are just some of the many programs that NADCA was part of last year. Please take a moment to read through our 2009 Annual Report. It will be a very positive and enlightening report on the many accomplishments made by your association in a year that we all would like to forget.

We fully intend to continue our efforts in 2010 in providing research, education, marketing and government relations for the North American die casting industry. I hope when I write the letter for the NADCA 2010 Annual Report that it talks about an industry turnaround which was quicker and greater than anyone could have projected. As always, thank you for your support of NADCA and all the products and services it provides for the die casting industry. Not everyone in the industry has invested their support or time in this industry organization, and those that have in 2009 are truly appreciated.

Daniel Twarog
President, North American Die Casting Association

www.diecasting.org/information/annual
Those Who Lead

NADCA 2009 Executive Officers and Terms

Jeffrey A. Albertson, 2009-2011
Inventix Mfg. LLC

Andrew D. Behler, 2005-2010
Blue Ridge Pressure Castings Inc.

Robert D. Black Jr., 2008-2010
DY-KAST Supply and Equipment Inc.

Paul Brancaleon, 2002-2009
Premier Tool & Die Cast Corp.

Gregory M. Brown, 2007-2009
ACE Precision Castings LLC

Drew S. Debrey, 2006-2009
Quad City Die Casting Co.
 - A Div. of Quad Cast Inc.

Dave DelPapa, 2008-2009
Aleris International

Scott A. Frens, 2005-2010
Fort Recovery Industries Inc.

Harold J. Gerber, 2009-2012
Albany-Chicago Co.

Frank C. Haney, 2008-2010
Tooling Systems LLC

Douglas D. Harmon, 2007-2012
Twin City Die Castings Co.

Bernard Jaeger, 2009-2001
Diversified Machine Inc.

Jeffrey A. Albertson, 2009-2011
Inventix Mfg. LLC

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Bernard Jaeger, 2009-2001
Diversified Machine Inc.

Those Who Lead

NADCA Board of Governors

Michael Stroh, Chairman
Stroh Die Casting Co. Inc.

Leonard Cordaro, Vice Chairman
Premier Die Casting Co.

Robert Dathe, Secretary/Treasurer
A&B Die Casting Inc.

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Diversified Machine Inc.

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President

Melisa Twarog
Education Manager

Stephen Udvardy
Director of Research, Education & Technology

www.diecasting.org/information/annual
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 Reason for Being

The year 2009 posted the largest downturn in the U.S. and global economy that much of the country has ever witnessed. In addition, the U.S. manufacturing industry has seen a steady decline that has been felt by the association. To address this, NADCA received unanimous support from its Board of Governors to implement its own relief initiative for its membership base in an industry directly impacted by the stream of economic events.

As the industry’s trade association, NADCA represents a range of companies directly and indirectly involved in the die casting industry including OEMs, suppliers, captive die casters and job shops. NADCA’s immediate plan to help its Corporate Members was to suspend each member’s dues assessment fees that make up part of the overall dues structure. The assessment fees are broken down into two categories for marketing and research and represent more than 10% of membership dues. Further, the Board voted to slash corporate member dues by 50%. Corporate membership dues are based on a company’s annual sales volume as they relate directly to the die casting industry and assessment fees.

Despite NADCA’s best retention efforts, a combination of the economy, downsizing, companies closing and offshore sourcing lead to a significant decrease in corporate membership, as illustrated in the graph below.

Individual membership dues were also reduced from $85 per year to $50, the largest discount ever offered for this level of membership, yet numbers still hit a 12-year low, as shown in the graph below.

Regardless of its membership decline, NADCA pledged to continue to represent the die casting industry with minimal impact to its daily operations by supplementing the loss in assessment revenues with funds from its general reserve.

“The latest economic developments have had a significant impact on the die casting industry, and NADCA is doing what it can to support its member base. It’s at the very least one step in the right direction,” said NADCA president Daniel L. Twarog. “NADCA will continue to offer the same high quality membership services it always has. We’re now in our twentieth year as the leading die casting association, and we, just like most businesses, are just finding ways to do more with less, to become a leaner operation.”
NADCA Chapters — Reaching the Industry

NADCA membership and resources are represented across the country through the efforts of its 15 active area Chapters. 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

Like the association, the chapters also struggled with membership woes, but continued to hold local meetings, host social events and organize tours. In 2009, only one chapter was able to promote die casting education by offering a national NADCA course. In a typical year, chapter courses are held in almost every active chapter. In a new and innovative endeavor, two chapters subsidized conference fees to send representatives to the annual Metalcasting Government Affairs Briefing in Washington, DC. The chapters sought to emphasize the importance of die casting to the U.S. manufacturing industry to lawmakers.

2009 saw two important changes for the chapters. The first was the merging of Michigan Chapters 1 and 3. The combining of the two chapters will result in stronger programming as well as a larger support base for its activities. Also, Chapter 29, which serves South Central U.S., has officially relocated to Tennessee. It was formerly based in Arkansas. The move was made to put the Chapter closer to die casters active in NADCA. Chapter 29 has been fairly inactive in the past few years, and it is believed that this move will reinvigorate the chapter.

NADCA continued to support active Chapters through membership rebates that were used for scholarships and other Chapter programming. In 2009, NADCA disbursed more than $12,000 to nine of the 15 active chapters that applied.

Education — Upgrading the Workforce

Attendance level for NADCA educational courses experienced a further decline in 2009 over 2008. National, Chapter, In-Plant, In-House and Train-the-Trainer class attendance in 2009 totalled 449 students for 28 course offerings extended by NADCA. Five national courses were taught with 21 students, one Chapter course with 15 students and 23 In-Plant courses with 400 students. The In-House Program was completed by 10 students at one facility, and three new trainers for the In-House Program were trained. NADCA licensee Southwestern Michigan College (SMC) suffered in 2009 also. Not a single NADCA course typically offered through SMC was offered in 2009 due to lack of attendance. Therefore, the grand total for 2009 attendance was 449 as compared to the 2008 attendance level of 924 and the 2007 level of 1,238. The decline was due to the overall state of the economy. With the economy and state of the industry projected to start recovering in 2010, attendance is expected to recover as well, although it may be a few years before levels hit those of 2007.

Despite the lack of attendance, the Education Program continued its effort to review, revise and translate courses. The EC-413 Die Cast Problem Solving Course was revised, and both the EC-902 Operating the Die Casting Machine and EC-514 Gating course presentations were translated to Spanish. The course funded by the OSHA Susan Harwood Grant Program, entitled Managing Combustible Dust Hazards in Die Casting Operations, was made available through instructor-led and online delivery mechanisms in English and Spanish. The online course is available on the NADCA Web site as well as www.youtube.com. Other training modules and courses developed in 2009 were the Dross Transportation and Greenhouse Gas modules available on the NADCA site and the EC-102 Introduction to Die Casting and EC-700 PQ^2 course available through ToolingU. A concerted effort was made in developing online courses, and this will continue in order to provide readily accessible cost-effective education to the industry.
Three years after the development of the whitepaper, the HyperCAST Project has received funds from the United States Department of Energy’s (DOE) Vehicle Technologies Office for the first year of this five-year exciting program. Including the HyperCAST Project, the research project portfolio consisted of 24 projects in 2009 with a total leveraged value (direct funding plus cost share) of approximately $56,000,000. The number of projects is the same as compared to 2008 because three new projects were initiated and three were completed; however, the total value of the portfolio has increased by nearly $37,000,000 due largely to HyperCAST. In addition to HyperCAST, two NADCA-funded projects were initiated in 2009. One project is focused on the rapid evaluation of surface engineered coating systems utilizing high intensity ultrasonic vibrations, and the other is focused on a mechanical means to grain refine and reduce porosity. With these new and the current continuing projects, the portfolio has maintained a good balance in research efforts in the areas of cast materials, die materials, computer modeling, process and energy/environmental technologies. In addition to the aforementioned DOE and NADCA funding, other sources for funds for the projects are the United States Department of Defense (DOD) through the Defense Supply Center Philadelphia – Philadelphia, PA; the Defense Logistics Agency – Ft. Belvoir, VA; the Armaments Research and Development Engineering Center – Picatinny, NJ; and Benet Laboratories – Watervliet, NY; the American Metalcasting Consortium (AMC); and DOE through the Industrial Technologies Program (ITP) and the Cast Metals Coalition (CMC) and through the United States Council for Automotive Research (USCAR)/United States Automotive Materials Partnership (USAMP) Program.

The accomplishments in 2009 stemming from completed R&D project results as well as other research and technology efforts include an updated and second version of a Die Materials “Turn Research into Action” brochure; a worldwide report on Aluminum Cast Materials; the 2009 revision of the #402 NADCA Product Specification Standards for Die Castings and #403 Product Specification Standards for Die Castings Produced by the Semi-Solid and Squeeze Cast Processes; a report on RoHS and REACH; the release of the #308 Extending Die Life for Aluminum Die Casting Report; publication of the 2010 Research & Development Strategic Plan and Roadmap; and, the release of the #513 Die Casting Porosity Guidebook. Other accomplishments are cited in the Energy Research & Energy Workshops Section of this annual report.

In addition to the documents mentioned above, technical information was disseminated at the 113th Metalcasting Congress over the course of 11 NADCA Congress Sessions. Eight of the sessions were of the standard format with the presentation of three Transactions papers in each session. Twenty-four papers were presented. Three of the sessions were of the special format type, comprised of a keynote presentation, success stories from die casters and suppliers and a panel discussion. This format was designed to assist the attendees in knowing how to best implement technologies. The topics of the special format sessions were Plunger Lubricants, Die Maintenance & Repair, and Die Spray.

The 2009 NADCA Transactions were made available online only. More technical information can be found on the recently revised R&D page of the NADCA Web site.

Note: Contributions to the above have been made by the technical committees and task forces which continue their efforts in identifying areas for future research, selecting new projects, providing oversight of current projects and assisting with the transfer of technology for the betterment of the industry.
Maximizing Knowledge through Industry Events

In 2009, NADCA conducted the 113th Metalcasting Congress, the Executive Conference, Metalcasting Industry Government Affairs Conference and the Plant Management Conference. The 113th Metalcasting Congress was April 7-9, 2009, in Las Vegas, NV. The annual event showcased the latest technology and research available to the metalcasting industry. Approximately 1,200 people attended the event, which featured more than 174 companies exhibiting their most innovative products and services.

This year again, AFS and NADCA co-hosted the show. The combining of efforts has created an event that represents every facet of the metalcasting industry. One of the most recognizable benefits of the joint show is the amount of research and technology presented. During the four days of Congress sessions, more than 50 technical presentations were delivered by leading researchers, professors and industry representatives.

The Die Casting Executive Conference was March 8-10, in Rancho Mirage, CA. The annual conference has undergone several format changes to attract a greater audience. The format change has also helped busy executives limit the number of days they are away from their plant. Featured presentations focused on the economy, U.S. health care, current politics, e-Business, metal pricing, emerging technology, REACH and the North American Die Casting Census.

More than 100 U.S. metalcasters, including 30 die casting representatives, visited Washington, DC, to attend the 2009 Metalcasting Industry Government Affairs Conference, which was held May 4-5 at the Capitol Hilton, Washington, DC. Attendees heard from U.S. Congressmen and policy experts on key industry issues and met with their members of Congress to discuss the impact pending laws will have on their business and the industry. The issues discussed included card check, cap-and-trade legislation, health care reform and mandated leave benefits.

The 2009 Plant Management Conference was Sept. 23-25 at the Hilton, in Northbrook, IL, located near NADCA headquarters. Special presentations included the State of the Industry, Carbon Footprint, and Cap & Trade as well as round table discussions. Two area die casters, Chicago White Metal Casting Inc. and Acme Die Casting hosted plant tours for conference attendees.

Aluminum over Ten Pounds
Pace Industries – St. Paul Division
Right and Left Hand Snowmobile Clips for the 2010 Polaris RUSH Snowmobile

Aluminum Squeeze/Semi-Solid
Aluminum Complex Components Inc.
Turbocharger Impeller for Cummins Turbo Technologies Ltd.
Public Relations

NADCA worked last year to maintain the positive and environmentally friendly image of the die casting industry in North America. NADCA provided information and statistics on the vitality of die casting. We informed the general public through press releases and our homepage area on “FAQ” about the trends in the industry. We promoted the unique components being die cast in this country. We provided calculations and documentation on how the industry was not a major greenhouse gas (GHG) producer, and we gave statistical basis for the industry improving its safety record. Our “FAQ” page had more than 125,000 visits in 2009. NADCA will continue providing positive public relations for the die casting industry in 2010.

Marketing

NADCA’s responsibility to market the die casting industry was very important in 2009. The industry cut back on its marketing expenses with hopes of conserving cash. NADCA actively marketed to casting designers with various technical and managerial information. The NADCA Design Web site was in its first full year of operation and boasted more than 13,750 visits per month (more than 165,000 for the year). Viewers on the site spent an average of a little more than five minutes per visit. More than 500 leads were generated with designers requesting more information on die casters abilities and dimensional capabilities. More than 6,960 hits per month were recorded on the industry directory. Web visitors also reviewed the 12 different industry white papers that deal with issues relevant to designers and purchasers of die cast components.

NADCA also launched a designer-focused electronic newsletter that is distributed monthly to more than 2,700 designers. The e-Newsletter has resulted in numerous questions from designers, and it has given them entry into capabilities and information that the industry has to aid in making the highest quality die castings in the world.

NADCA will continue marketing to designers in 2010 as we seek to increase the application of die casting in every market area and as we dispel some of the myths about die cast products.

Industry Facts & Figures

The Wage and Benefit Survey, published annually by NADCA, was conducted in December of 2009. The survey represented 39 companies in the die casting industry nationwide. The participating companies table defines the group of facilities in terms of annual sales, number of die casting machines, number of employees, etc. Information provided both nationally and by region.

This year, the typical participating company had annual sales of $16 million per year, utilized 16 die casting machines and employed 88 full-time direct labor employees and 62 hourly production employees. Fifteen (15%) were union shops. Less than 1% of the total production employees reported were temporary. Nearly 70% of the survey participants’ total employees were hourly production employees. Less than half the companies (23%) reported a general wage adjustment in the last 12 months. The median value of the adjustment was 2.5%.
85% of workers had access to medical benefits and more than half to vision coverage in September 2009. 10% of the companies offered sick pay. Of that number, 3% allowed the sick days to be accrued for future use.

The report also covers how hourly employees were compensated, what benefits they received and how practices vary by company size and location.

Publications – Documenting Technology

NADCA introduced several new and revised publications and software in 2009 that will continue to spread information and technology that is being developed. The following publications were revised or new in 2009.

- Wage & Benefit Survey
- Microstructures and Properties of Aluminum Die Casting Alloy
- Die Casting Porosity Guidebook
- Extending Die Life for Aluminum Die Casting
- Die Casting Industry Report 2008 – Download
  → Part 1 – Census of the Die Casting Industry
  → Part 2 – Die Casting Shipments
  → Part 3 – Die Casting Machine Estimates
  → Part 4 – End-Market Analysis of the NA Die Casting Industry
- Die Casting Industry Report 2008 – Book
- Product Design for Die Casting
- NADCA Product Specification Standards for Die Castings
- NADCA Product Specification Standards for Die Casting CD-ROM
- Standards for Semi-Solid and Squeeze Cast Processes
- Standards for Semi-Solid and Squeeze Cast Processes CD-ROM
- Die Casting Industry Capabilities Directory – CD-ROM

Magnesium under .5 Pounds

Phillips Plastics Corporation® – Magnesium Injection Molding
*Micro Projector Main Housing for 3M Precision Optics Inc.*

Magnesium over .5 Pounds

Chicago White Metal Casting Inc.
*Medical Imager Side Wall for Codonics*
Die Casting Engineer (DCE) magazine is distributed to all Individual Members, Corporate Members and subscribers. In 2009, more than 17,000 copies of Die Casting Engineer were in circulation, with an average of 2,800 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 approximately 50 technical articles throughout the six issues. The themes for 2009 included furnaces/energy, zinc, computer modeling and simulation, advanced technologies, die and plunger lubricants/plunger tips and magnesium.

Twenty of 2009’s technical articles were contributed by NADCA Corporate Members, and 17 were contributed by NADCA individual members.

DCE officially launched its own Web site in January of 2009 — www.diecastingengineer.org. The new Web site was redesigned to be easier to navigate and more reader friendly. The site contains its old features as well as some new ones, and is still accessible through the main NADCA Web site.

Visitors to the site can easily submit articles, news releases and comments, and they can get a sneak peak of each issue through the featured article and the Table of Contents. Members and subscribers that visit the Web site can log in to view the entire current issues and a few previous issues. The most up-to-date die casting industry news is also posted on the main page. The site saw about 1,300 visits per issue in 2009.

Die Casting Industry LINKS finished its ninth 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 full 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.

In 2009, LINKS began to be printed and mailed in-house at NADCA. While this saved on the bottom line costs for the magazine, it still allowed for the same great content and articles that readers look forward to each issue.

Honorable Mention Aluminum One to Ten Pounds
Aalied Die Casting Co. of North Carolina
Axle Carrier Housing for Dana Automotive Systems Grp.

Honorable Mention Aluminum over Ten Pounds
Blue Ridge Pressure Casting Inc.
Mack Truck Grill Surround and Air Intake
NADCA’s new Web site design was unveiled in the fourth quarter of 2009. This fresh design increases the ease of navigation for all viewers. The new Web site design has the same features as before, with some exciting new ones.

The NADCA Web site, last redesigned in 2004, connects its visitors to NADCA resources, and especially helps connect NADCA members to the benefits they receive from the association.

NADCA retooled the old Web site navigation system in favor of having all material arranged by category into drop down menus. This enables all content to be reached by only one or two clicks. Features of the Web site include information on die casting, marketing, company directories, events, membership, government affairs, education, technology and publications.

In addition to easier navigation, NADCA rolled out a number of improvements to the site over the summer. An updated news system, a new calendar program that includes all NADCA events and a new advertising system are just a few of these improvements.

The online training area was expanded yet again. Newly launched modules include Staying Safe with Dross, Greenhouse Gas and Managing Combustible Dust Hazards in Die Casting Operations. The online training area, located at www.diecasting.org/training, contains a wealth of information including free videos, tutorials and statistics.

NADCA also became part of Web 2.0 and Social Networking. People can now join the NADCA group on Facebook and also view free online dust training tutorials on YouTube. Videos on YouTube include topics on dust training, energy, safety in the die casting workplace and much more. Photos of the latest International Die Casting Competition winners can be seen on Flickr and networking opportunities can also be found on Linkedin. Links to all of these social networking pages can be found at www.diecasting.org.

NADCA’s popular Die Casting Message Board was also upgraded. Now located at www.diecasting.org/forum, the new Message Board is the place to share questions and knowledge with peers. Users will find the new board easier to use, and also that it includes new features such as private messaging, RSS syndication and the ability to post attachments.

Die Casting Engineer magazine has now moved to its very own Web site. The improved Web site has its old features as well as some new ones, and is still accessible through the main NADCA Web site. The site contains up-to-date news, articles and information.

Advertising revenue for the Web site in the year 2009 continued to offset the expenses of the Web site.
Metalcasters Alliance for Government Affairs

During the past year, the NADCA Washington office has been busy advocating on the association’s priority issues before Congress and the Executive Branch. In 2009, NADCA and AFS joined forces to sponsor the Metalcasters Alliance for Government Affairs, with each association combining its federal government affairs services. This went into effect July 1, 2009, and entails a coordinated, joint federal advocacy effort while still maintaining each group’s status as separate organizations.

The Metalcasters Alliance for Government Affairs continued to be represented by Waterman & Associates, a Washington, DC, firm.

In addition, a Web site was created at www.metalcastinggov.com for the new alliance, disseminating the latest news and government updates, detailed information on priority issues and important government related links. The goal of the Web site is to disseminate critical information on Federal legislative and regulatory actions that may affect the more than 2,100 metalcasting facilities (representing 200,000 plus workers) in the U.S.

Metalcasting Government Affairs Conference

More than 100 U.S. metalcasters visited Washington, DC, to attend the 2009 Metalcasting Industry Government Affairs Conference, which was May 4-5 at the Capitol Hilton, Washington, DC. Attendees heard from U.S. Congressmen and policy experts on key industry issues and met with their members of Congress to discuss the impact pending laws will have on their business and our industry. The issues discussed included card check, cap-and-trade legislation, health care reform and mandated leave benefits. The two-day event featured presentations from Dr. Peter Morici, economist from the Univ. of Maryland, who provided an overview of the 2009 Economic Outlook and the role of the new Administration in fixing the economy. Attendees also had the opportunity to hear from several members of the U.S. Congress, including the ranking member of the Budget Committee, Rep. Paul Ryan (R-WI), Rep. Louie Gohmert (R-TX) and newly-elected Rep. Brett Guthrie (R-KY). Congressman Guthrie is the first metalcaster in more than a decade to serve in the U.S. Congress.

Priority Issues

Here are some highlights of the priority issues of the Metalcasters Alliance for Government Affairs.

HyperCAST Green Technology – Key goals for the 111th Congress included rebuilding the nation’s economy, maximizing energy efficiency and reducing greenhouse gas emissions. Congress has recognized that investing in HyperCAST green technology will help to advance each of these goals. HyperCAST was authorized in the Energy Investment and Security Act (EISA), and the initial $1.5 million to advance the technology was appropriated with bipartisan support in Fiscal Year 2009.

Expansion of the Family Medical Leave Act – The Family and Medical Leave Act (FMLA) of 1993 provides 12 weeks of unpaid leave to employees that meet certain eligibility requirements and who work for employers with 50 or more employees. Lawmakers are looking closely at ways to expand the reach of the Act, as well as making some of the leave paid. In May, legislation, the Healthy Families Act (H.R.2460), was
introduced in the House that would require employers with 15 or more employees to provide seven days of paid sick leave to their workers. The bill has more than 100 co-sponsors. Most metalcasters already provide excellent paid time off packages to their employees, but Congress would like to mandate that businesses provide seven days of paid sick leave to their employees in addition to the leave already offered.

**Protecting America’s Workers Act (PAWA)**

– Rep. Lynn Woolsey (D-CA) reintroduced the Protecting America’s Workers Act (H.R.2067) with 32 co-sponsors at the end of April, 2009, and a Senate companion bill is expected soon. This legislation is a top priority for organized labor and key lawmakers that oversee the U.S. Department of Labor. It is in response to their belief that the Occupational Safety and Health Administration's (OSHA) penalty structure is woefully inadequate. Civil and criminal penalties for OSHA violations would be significantly increased. The Metalcasters Alliance is concerned that this bill arbitrarily increases fines on employers and increases civil penalties and imposes new criminal penalties which could land an employer or safety manager in jail, even if an employer was to do everything possible to prevent a workplace accident.

**OSHA Enforcement** – The Occupational Health and Safety Administration (OSHA) has released the top 10 list of the most frequently cited safety and health violations for the metalcasting industry for fiscal year 2009. The most cited OSHA violations for both iron and steel metalcasting facilities were air contaminants, respiratory protection and lockout/tagout. The top three most-often-cited OSHA violations for aluminum metalcasting facilities were lack of respiratory protection, personal protective equipment and machine guarding. Violations of the lead standard, air contaminants and lack of respiratory program represented the top three OSHA violations for copper facilities. OSHA plans nearly 40,000 safety investigations annually, not to mention many unplanned investigations based on imminent hazards and employee complaints.

**Climate Change** – Energy prices are already high, but Congress wants to increase them even more, all in the name of reducing America’s carbon footprint. Economists estimate a national cap on carbon emissions could increase electricity prices by $0.17 per kWh by 2030! Such an increase in energy costs would undermine the industry’s competitiveness with countries like China and India that do not have a similar cap on greenhouse gas emissions. While the bill contains a provision to assist energy-intensive and trade-exposed industries transition to a low-carbon economy, it is the Metalcasters Alliance’s understanding that foundries would not qualify to receive the rebate.

**Government Affairs Committee**

The NADCA Government Affairs Committee is responsible for directing metalcasting’s government relations efforts in Washington, DC. The committee identifies legislative and regulatory priority issues, as well as recommends policy and projects that will support the metalcasting industry and its interests. NADCA members are encouraged to become more familiar with this committee, as it provides a valuable resource for metalcasters to learn more about the key issues facing our industry and metalcasting’s efforts to address them. And, likewise, the NADCA membership base can provide valuable input to assist the committee in its determination of the priority issues and management of the federal affairs program.
NADCA Design Assistance

The NADCA Design assistance program is available to help designers and specifiers of die castings, typically known as Original Equipment Manufacturers (OEMs), obtain an optimized die cast product. The “NADCA Design” program provides multiple resources to assist with the development, design and manufacturing of a die cast product. OEMs familiar with NADCA Design content will see improved manufacturability and performance of their final die cast product. In addition, NADCA Corporate Members can gain much by integrating the NADCA Design resources into their own design assistance programs.

Seminars: The NADCA Design Seminar is the core offering of the NADCA Design program, covering in detail all aspects of die casting product design and development. The seminar also covers the die casting processes and associated tooling. In 2009, NADCA Design seminars were held at Robert Bosh Tool Co. in Mt. Prospect, IL, the manufacturer of the Bosch, Hawera, Skil, Dremel and RotoZip lines of power tools and also at Alcon Labs in Irvine, CA, a manufacturer of eye surgery devices. More information on the NADCA Design Seminar may be obtained at www.diecastingdesign.org/seminars.

Instant Design Assistance: Direct design assistance is available through the on-staff NADCA design engineer at www.diecastingdesign.org/contact. In 2009, designers and purchasers from 70 different OEMs were provided with design assistance via telephone and e-mail. The assistance typically involves discussion of a specific product design and the various properties that may make it a good candidate for die casting, a review of die casting alloys and their properties, and part design geometry. Finally, if the OEM is not currently working with a NADCA die caster, they are led to the online “Find a Die Caster” database on the NADCA Design Web site to connect with die casters to quote their part.

The NADCA Design Web site: The NADCA Design Web site www.diecastingdesign.org provides practical information that OEMs need to develop, design and manufacture their die cast products online. In 2009, three major modules were added to the Web site: Product Development, Manufacturing Economics and Die Casting Processes.

This year, more than 8,073 unique visitors viewed the NADCA Design Web site with 57% being new visitors and 42.86% being return visitors. More than 1,077 visitors viewed more than 20 pages on the site during their visit. The most popular section of the Web site was the Find a Die Caster database, followed by the NADCA Standards section, information on draft and the winners of the 2009 International Die Casting Competition.

New NADCA Design e-Newsletter: In November 2009, the first NADCA Design e-Newsletter was delivered via e-mail to thousands of OEMs. Current and archived e-Newsletters may be viewed www.diecastingdesign.org/newsletter.
Energy and Environment — Assisting the Industry

Two efforts were added to NADCA’s focus on energy and the environment this year: offering the energy efficiency workshops and staying on top of climate change (cap and trade) legislation. NADCA also continued to pursue opportunities to collaborate and conduct additional research and development projects on increasing energy efficiency and environmental friendliness of die casting. In addition, all major energy resources have been put in one location at www.diecasting.org/energy.

As a service to the industry, NADCA offered two energy efficiency workshops entitled “Energy Efficiency of Melting and Holding Aluminum Workshop.” These workshops were sponsored by NADCA and developed in part by Case Western Reserve University to be one-day events. Registration costs were kept low at $50 for members and $100 for non-members. The workshop involved a half-day of presentations from industry leaders in energy efficiency. The presentations were kicked off by a keynote presentation entitled “Cap and Trade, Greenhouse Gas and Carbon Footprint.” This talk motivated the need for energy efficiency based on pending climate change legislation, and the talk included a description of how to calculate a die casting plant’s carbon footprint. Other topics included efficient reverb furnaces, stack melters and recuperation. All presentations were given in the morning for each workshop. After the presentations, lunch and a tour of the hosting facility was provided. The tours allowed attendees to see energy efficient projects put into use. One workshop was held at Ryobi Die Casting in Indiana, and the other was held at Mercury Marine in Wisconsin. Both events were fully booked with approximately 50 attendees at each event. Due to the success and positive feedback, more workshops are planned for 2010.

Climate change legislation, frequently called cap and trade, has been pending all year. In response, NADCA has been monitoring this issue and generating resources to aid the die casting industry. Many in the industry worry about this climate change as it relates to cap and trade legislation, EPA PSD rulemaking, carbon footprints and greenhouse gases. Early in 2009, free video training was created and hosted on NADCA’s Web site to give an introduction and overview of climate change legislation and its effects on the die casting industry. At the end of the training, a calculator is available to calculate the carbon footprint of a die casting plant. This calculator was also used to conduct a survey of the die casting industries’ carbon footprint. The survey concluded in December of 2009 and was available in the January 2010 issue of the Die Casting Engineer magazine. NADCA has and will continue to monitor issues related to climate change and create press releases, articles, reports and other tools as further information is revealed.

Opportunities for Interns — David Laine Scholarships

For more than 30 years, NADCA has encouraged studies in the many disciplines related to die casting with David Laine Memorial Scholarships. Established in 1975, the scholarships honor David Laine, who served for 29 years as secretary of the American Die Casting Institute (ADCI), a forerunner of NADCA.

The main objectives of the scholarship program are to provide financial assistance and encouragement to students who are interested in careers in the die casting industry, to foster and improve engineering education in die casting technology and to stimulate awareness of and interest in the die casting process.

NADCA awarded five full-time undergraduate students with 2009 David Laine Memorial Scholarships. The combined total of the scholarships was $15,000.

Internships for 2009 gave opportunity for students to be involved in various projects, which included assisting in die changes, performing safety audits, runner and gating design, part modeling, die casting sales & marketing and quality control.

In recent years, NADCA has seen increased interest and applications for the Laine Scholarship. Those who receive this prestigious award are better-positioned to focus on their academics and career development. Indeed, the Laine Scholarship has also had a significant impact on retaining talent in metalcasting: more than 75% of the past scholarship recipients have gone on to work in die casting.

The scholarships provided by the Laine Fund are supported entirely by contributions and pledges from the die casting community. For more information, visit www.diecasting.org/scholarship.
Bottom Line

2009 saw a slow economy with many businesses experiencing lower than expected revenues and net profits. NADCA ended up with both revenue and expenses under budget. Total revenue for the year was approximately $1.5 million. Department expenses wereapproximately $750,000. General and Administrative expenses ended up 8% below budget. A significant factor for the reduction in overhead expenses was a decrease in benefit costs of 37%.

2009 Department Revenue

Education and Research & Development were among the top departments in net revenue. Education’s revenue over expenses was approximately $61,000, with expenses coming in under budget for the year. 2009 saw a significant increase in In-Plant classes. R&D Department activity also was up due to funding for the HyperCAST Research Program.