



AIA New Hampshire forum

For those who shape the built environment

New Executive Director Named

Bonnie Kastel begins AIANH Executive Position on October 1



We are pleased to announce that Bonnie Kastel has been selected as the new Executive Director for AIA New Hampshire, to begin October 1. Bonnie joins us after many years as an independent consultant working on branding, marketing, and communications projects for a range of non-profit and corporate clients, with a focus on online media assets. She brings a wealth of experience in design initiatives and project management from engagements with museums and universities to startup software companies. Bonnie also has significant experience as a fundraiser. She served as Development Director at the Museum of Fine Arts, Houston where she played a key role in securing funding for exhibitions, education programs, and most notably, the capital building campaign to construct the Rafael Moneo wing of the museum. With a degree in Art History from the University



Bonnie Kastel

Continued on p. 14

2017 AIANH Design Awards: Call for Entries Available



The Call for Entries for the 33rd AIANH Excellence in Architecture Design Awards program is now available.

Participation in the Awards Program gives you firm exposure and recognition. It is true that not everyone wins, but all projects receive promotion:

- All entries of single-family residences will be published in the Jan/February issue of *NH Home Magazine*, with a follow-up of the winners in a later issue.
- All submissions are part of an online



**AIA
New Hampshire
Design Awards**

People's Choice Vote, which will run Dec. 9, 2016-Jan. 13, 2017.

- All projects are included in our Annual Awards Book, and all are on view and included in a Power-Point presentation at the Annual Awards Gala.
- All entries are exhibited at various sites around the State during the year, includ-

Continued on p. 14

Contents

New Executive Director Named	1
AIANH Design Awards CFE	1
Perspective	2
Emerging Professionals Network	3
Promote Healing Through Architecture <i>by Rebecca Dillon AIA</i>	4
Fire Code Update <i>Jerry Tepe FAIA</i>	5
New Members & New Architects	5
Great Church of Thessaloniki <i>by Bruce Hamilton AIA</i>	6
2030 & Beyond Session 1 Review <i>by David Ely AIA</i>	8
AIANH House Tour photos	10
AIANH at Applecrest: photos	12
Construction Summary	15
Photo of the Month	16
Calendar	16



2016 Board of Directors

President: **Jay Lawrence Purcell AIA**
 Pres-Elect: **Sheldon Pennoyer AIA**
 V-President: **Alyssa Murphy AIA**
 Sec/Treas: **Tracy Kozak AIA**
 Immediate Past President:
Paul Bourbeau AIA
 Directors: **Nick Isaak AIA**
Susan Phillips-Hungerford AIA
Bart Sapeta AIA
 Associate Director:
Tony Nazaka
 Affiliate Director:
Liz LeBlanc
 Executive Director: **Carolyn Isaak**

NH Forum is published monthly by AIA New Hampshire, the New Hampshire Chapter of The American Institute of Architects.

For advertising rates and sizes, contact the AIANH office.

For membership information, contact the AIANH office.

Articles and graphic submissions should be sent to the AIANH office by the first of the month prior to publication.

NH Forum Editorial Board:
Bruce Hamilton AIA, Liz LeBlanc, Dale Doller AIA, Carolyn Isaak Hon. AIANH
Proofreader: John Urdi AIA;
 Lead-in thumbnails by **Eric Palson AIA**

The AIANH Editorial Board reserves the right to edit articles for available space and to review all material for appropriateness prior to inclusion.

The editors of the *NH Forum* seek to encourage a lively discussion of design and other topics of concern to designers. Opinions and proposals presented in the newsletter are those of the writers to whom they are attributed and are not a statement of official policy by AIANH, unless so stated.

AIANH
 310 Marlboro St., 2nd Floor
 Keene, NH 03431
 Tel: 603-357-2863; Fax: 603-357-0835
 E-mail: office@aianh.org
 Visit our Website at www.aianh.org

Perspective

Point of view from the President of AIANH
Jay L. Purcell AIA



As some of you may know, the AIA New Hampshire Board of Directors has been busy since late winter with the work of finding a new Executive Director to take on the role in

October when Carolyn Isaak retires from the position. Thanks to the efforts of a dedicated committee of the Board, we were all able to interview four well-qualified persons from a field of eighteen candidates. Special thanks go out to Shannon Alther AIA, our past, past president who volunteered to follow through as committee chairman and brought us together for the final candidate interviews. Other Board members on this committee were Alyssa Murphy AIA, Susan Philips-Hungerford AIA, and Paul Bourbeau AIA. They also deserve a note of thanks for above and beyond service.

I'm happy to report that the Board's offer to our selected candidate was accepted, and that Bonnie Kastel will become our new Executive Director. With Carolyn's help during a three-month transition period, we feel Bonnie will be up to the task. As we went through this search process, we realized more than ever the multifaceted nature of this position. Yes, Carolyn has been wearing many hats all these years, and we are extremely grateful that she will be helping Bonnie get up to speed quickly.

Bonnie, who resides in Portsmouth, brings some excellent experience to AIANH with a background in project management and marketing management for corporate clients, much of this as an independent consultant. She also spent some time as a development director with the Museum of Fine Arts in Houston some years ago. (Her degree is in Art History; coincidentally Carolyn also has a degree in Art History, so something good there.) One of the characteristic traits she projects is enthusiasm, and the Board noted her background as a self-starter and good communicator as important qualities that will make this a good fit.

With this part of the Executive Director transition completed, and this year's monthly

Bonnie brings some excellent experience to AIANH with a background in project management and marketing management ...

events all planned out (yes, we have had some great events this year and there are more to come), we are now able to turn our focus to other tasks that need our attention. One of these is identifying candidates for new Board members, since we have three positions completing their terms this year, and one member relocating to Virginia. We will all miss Dennis McNeal AIA, who has been doing an excellent job as the Board's secretary/treasurer, but wish him the best of luck in his new position in Virginia.

Our nominating committee has been working to identify candidates, and this is currently ongoing. Those of you who know AIANH members who you think would be good AIANH Board member candidates, please get in touch with me through Carolyn at office@aianh.org. And if you yourself are interested in serving now or in the future, let me or another Board member know. We look forward to completing this search by mid-August so nominees can attend our annual Board Retreat Oct. 6-7 as an orientation. Board members are actually voted in at our Annual Meeting, which is part of the Awards Gala January 20, and participation on the Board would begin January 21, 2017. ■



Striving to be the leading voice promoting free enterprise within the construction industry!

For more information or to learn more about membership contact the Chapter office:
 603-226-4789



Emerging Professionals Network

Point of view from the AIANH Associate Director & EPN Chair
Tony Nazaka



Architecture for Animals

In case you may have been living under a rock, this past month a controversy was sparked about a little boy who fell into a gorilla pit at a zoo. The controversy covered everything from a lack of parental overlook, to animal cruelty, to proper buildings/structures to house and observe animals. Again, as you probably already know, the gorilla was tragically shot and killed as a means to save the young boy's life. This is one of those social situations that, no matter what happened, was not going to have a good outcome. Could architecture have played a role in avoiding such a tragedy?

Being part of the architecture profession, this made me wonder a number of things: how did a child end up in an enclosure that housed such a dangerous animal? Who was the space designed for, the user (which is ultimately the animal), or the visitor (the human)? Is the end means of architecture solely for a human experience, or should it encompass the aspect of life in general?

In watching the chilling video, as well as reading a number of witness accounts, it became very obvious the space lacked the design to properly house the animal; it was designed mainly for the visitor, albeit poorly since a child was able to gain access to an area which was supposed to be inaccessible. After the incident, the zoo director stated that "the child was being dragged around... his head banging on concrete." Watching the video, it was apparent the gorilla was in a confined man-made structure with materials totally distant to its natural habitat. Why was there even a concrete floor for the gorilla to drag something on? Would we, as architects, EVER design something for a human as foreign and impractical as this? (Think of an architect designing a dirt floor in your house!)

I loved going to zoos as a kid. Most notably, the Boston Aquarium and the National Zoo in D.C. Thinking back on those experiences, while I was having a great time running around and seeing all the animals, I now

recall visions of ever so obvious man-made structures, with sad animals pacing in the middle. They are essentially glorified jails. One of the saddest cases of this occurrence is the polar bear. The polar bear's natural habitat is the ring around the Arctic Circle. But who is going to visit a zoo in the Arctic? The next best thing (in our minds), is to bring them here, and try our best to recreate their environment. The failings of this notion become apparent when one does a quick google image search of polar bears in a zoo. Images of withered bears whose fur is turning brown instead of white makes one wonder if it's even worth the time, effort, money, and the sacrifice of the bear's quality of life to have such an attraction.

Now, I am not naive enough to propose the notion that the zoos being built should be Jurassic Park-esque. But, as a designer, I know there has to be a better solution than faux

Continued on page 14



VIEW RAIL Cooper stairworks

CABLE RAIL SYSTEMS

Architecturally correct for both internal and external use. Viewrail's innovative design allows all of the fastening hardware to be hidden inside either wood or steel posts. The same concepts that make it elegant, also make it easy for contractors to install.



www.ClearyMillwork.com
800 486 7600

Contact Bill Osgood
for more information.

774 273 0274

NCARB & You: AXP, ARE, and Certification — September 29

On September 29 we are holding a special event with a presentation on a range of licensure topics relevant to students, aspiring architects, supervisors, architects, and people in the architecture profession.

A representative from the National Council of Architectural Registration Boards (NCARB) will visit New Hampshire to review the steps necessary to achieve licensure to become an architect and other programs to get the most out of your career in architecture.

Topics will include:

- Background of NCARB
- The entities involved in the licensure process
- How to establish an NCARB Record
- How to progress successfully through the Architectural Experience Program® (AXP®)
- What to expect with the Architect Registration Examination® (ARE®)
- Recent changes to NCARB programs
- Value of the NCARB Certificate

The presenter will remain on-site after the presentation to help address specific questions on an individual basis. This is your opportunity to get all of your questions answered!

Please join us, 5:30 pm, at Lavallee Brensinger Architects in Manchester, NH. Pizza and beer are part of the program!

You must pre-register, and information on that is on our event page: <http://www.aianh.org/news/aianh-events>.

We hope to see you there!



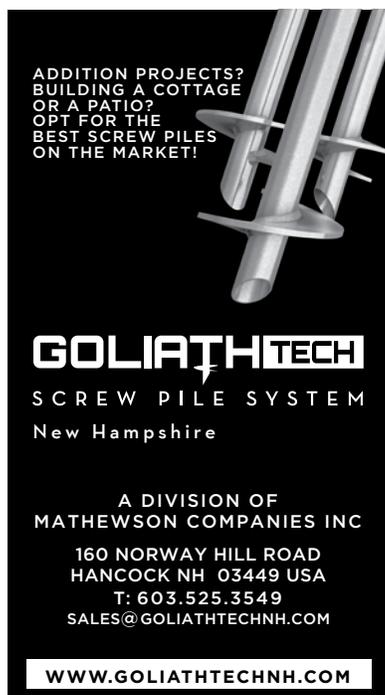
**PLEASE SHARE WITH OTHERS
IN YOUR OFFICE!**

Seeking NE Homes for TV Show

Light House Media Solutions, which has a successful New England boating destination program on NESN, is about to launch a home-related show and magazine. They are searching throughout New England for beautiful homes that incorporate these three elements: Marvin windows, Sub-Zero, and Wolf appliances.

New England Life and Home is a lifestyle TV show, magazine and website sponsored by Clarke Distribution (Sub-Zero, Wolf) and AW Hastings (distributor of Marvin windows). With each episode, article and feature story, New England Life and Home celebrates the art of entertaining in New England by focusing on the things that matter most to us all—family, friends, food, and of course, our home—where function, innovation and beautiful design unite to elevate our lives.

If you have a project fitting this criteria, please contact: Janice Randall Rohlf, Editorial & Content Director, Editor, Southern New England Home, Lighthouse Media Solutions, 617-543-3902, jrrohlf@LHMediaSolutions.com



ADDITION PROJECTS?
BUILDING A COTTAGE
OR A PATIO?
OPT FOR THE
BEST SCREW PILES
ON THE MARKET!

GOLIATHTECH
SCREW PILE SYSTEM
New Hampshire

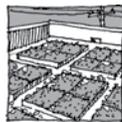
A DIVISION OF
MATHEWSON COMPANIES INC

160 NORWAY HILL ROAD
HANCOCK NH 03449 USA
T: 603.525.3549
SALES@GOLIATHTECHNH.COM

WWW.GOLIATHTECHNH.COM

Promote Healing through Architecture

by Rebecca Dillon AIA, LEED AP BD+C,



Leading a healthy lifestyle has become standard in today's world. From organic foods to preventive care to exercise and fitness to office wellness programs, more and more people take part in the practice of self-driven health. It is no longer a matter of just what you eat but a myriad of factors that play a large part in leading us to great health.

When designing Healthcare facilities, architects, designers, and landscape architects understand that the healing starts in the planning of the structure and its outdoor environment. Healing environments are described as nurturing and therapeutic and most importantly, as places that reduce stress. Not only is reduced stress amongst residents and patients needed, it is also a key factor in helping staff to better serve their patients. Buildings designed under this premise, promote health, healing, and recovery.

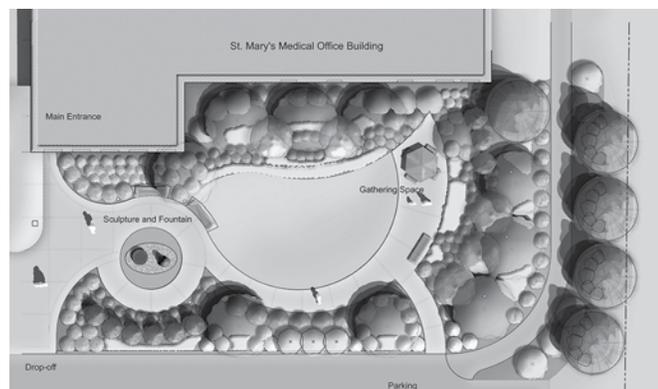


Sanctuary

proportions and form and our perception of the space defines our experience. Along this same vein of experience is the use of our senses. Our sensory experience can evoke emotion. Planning through lighting, sound, color and texture can promote positive feelings for healing. Lastly, a Sense of Place and/or spirituality to make a space special should be integrated into the surroundings. Rooms for peaceful respite and décor that can inspire the mind are aspects that should find their way into healthy space planning.

The four areas defined above are a starting place for a larger conversation with stakeholders to discuss promoting healing from the ground up. Through research with patients, families, staff and more, a lot can be learned to help

define these aspects specific to the facility and its environment. No area should be free from being assessed as an area that can help drive the health of the people within the space.



At Gawron Turgeon Architects in Scarborough, ME, we use certain parameters to help us determine the right elements for each healthcare client's healing environment. Much of the evidence-based design research relates healing spaces to nature and natural elements. That is exactly where we begin, with nature. As humans, we have an innate desire to be connected to nature. Scientific studies support the positive impact that natural forces have on us and the use of these elements can enrich our environments.

Another parameter is the understanding of how our body and mind experiences the built environment. We ingest the space's volume,



— Rebecca Dillon, AIA is licensed in Maine and NH and is a Principal and Vice President of Architecture | Gawron Turgeon Architects

Fire Code Update

by Jerry Tepe FAIA



The 2015 Life Safety Code, NFPA 101, is now the applicable fire code, effective June 30, 2016. Note NFPA 1 remains at 2009 edition as does the IBC and other building codes.

Effective June 30, 2016 the New Hampshire Fire Code reads as follows:

New Hampshire fire code” or “state fire code” means the adoption by reference of the Life Safety Code 2015 edition and the Uniform Fire Code NFPA 1, 2009 edition, as published by the National Fire Protection Association and as amended by the state board of fire control and ratified by the general court pursuant to RSA 153:5. The provisions of any other national code, model code, or standard referred to within a code listed in this definition shall be included in the state fire code unless amended in accordance with RSA 153:5.

Additional Guidance for Potential Conflict between the Codes:

The NFPA 101 Life Safety Code, 2015

edition addresses construction, protection, and occupancy features necessary to minimize danger to life from the effects of fire, proper design and function of egress, and other protective safeguards essential to life safety.

As such, when you are utilizing the NFPA 101 Life Safety Code, 2015 edition, both the referenced publications in Chapter 2 and the specifically cited editions are required as part of this Code.

When the underlying requirement comes from NFPA 101 (2015), stay in NFPA 101 (2015) to include those referenced publications/editions to the extent possible. If the underlying requirement comes from NPFA 1 (2009) stay in NFPA 1 (2009) to include those referenced publications/editions to the extent possible.

If you have questions regarding this notice or a potential conflict between the two codes or editions of the codes, please contact us for further assistance at fmo@dos.nh.gov or 603-223-4289. ■

Welcome

New AIANH Affiliate Members

Phil Bolduc
Mike Mathieu
David Sysko
Neokraft Signs, Inc.

Bob Champagne PE
Summit Engineering

Jim Giberson
Cordelia Pitman
Wright-Ryan Cnstruction

Rob McLean
Bob Reals
Liberty Utilities

Scott Tirrell
Pella Windows & Doors

Congratulations

Newly licensed NH Architects

Sean Landry
Lavallee Brensinger
Architects
Peter White AIA
Peter J. White & Assoc.
(Last fall, and we missed it!)



AIA
New Hampshire

CONGRATULATIONS 2016 MARVIN ARCHITECTS CHALLENGE WINNERS



**- 2016 WINNER -
BEST TRANSITIONAL/ECCLECTIC WINNER**

EDGEWATER II, Harrisville, NH

Architect: Dan Scully Architect Firm: Daniel V. Scully Architects

TO VIEW THE FULL GALLERY OF WINNERS, VISIT: www.marvin.com/architectschallenge



Let us help you turn your blueprints into beautiful spaces.
To explore solutions for your next project, contact your
New Hampshire Marvin Representative

Patrick Gordon at 413.384.0000

pgordon@awhastings.com or visit marvinwindows.com



Built around you.®

Details...

Sitework has begun and building construction will soon commence on a new state-of-the-art, 9,000 sf fire and rescue station in Milton, NH designed by **Cowan-Goudreau Architects**. The new facility, which is being built by **Eckman Construction** will replace the outdated 65-year-old current station and provide a safer, more functional space for Milton's Fire and Rescue teams.

The new station is being constructed on a plot of land donated by the Downs family, as the project will honor the memory of the late Herbert Downs, Sr., who served as Milton's Fire Chief for several years. The facility will include four apparatus bays and is designed to accommodate full-time staff with living quarters to meet the future growing needs of the department.

The Great Church of Thessaloniki

Text & Photos by Bruce Hamilton AIA

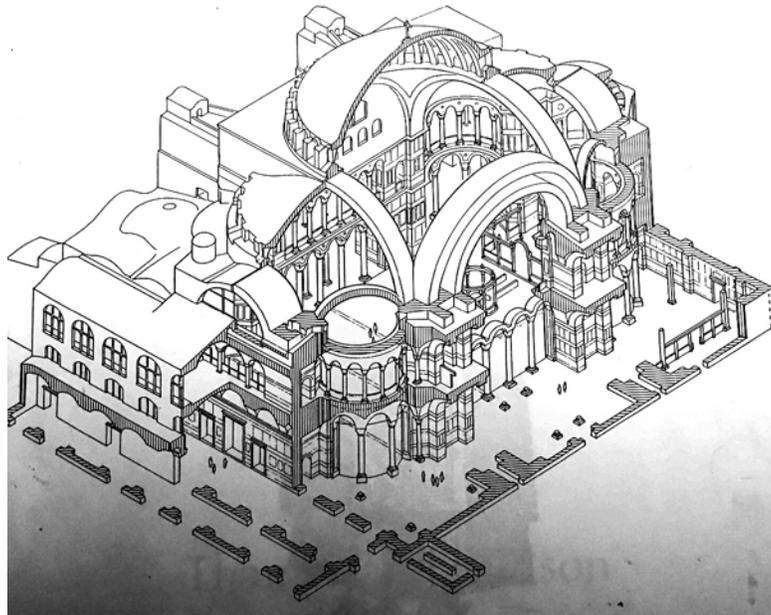


It's hard not to speak in superlatives when describing this epic cradle of civilization. During our escorted tour of Istanbul in Turkey, we were able to see such world-famous sites as Hagia Sophia, Topkapi Palace and the Blue Mosque, along with seldom-visited wonders.

The design of Hagia Sophia is best understood as starting at the center of the building, given that the design unfolds from the center. Standing under the apex of the dome, the

building at first glance appears amorphous, but in time, the shapes become clear. To the east and west, space expands longitudinally, to the east into the forechoir and the apse, and to the west into the entrance bay. The shapes develop both centrally around a middle axis and longitudinally, from entrance bay to the apse.

Adding to the grandeur of the space are the precious materials, subtly graded in color, that shimmer over the interim. From dark gray marble plaques of pavement rise high



Isometric of Hagia Sophia



Exterior Photo of Hagia Sophia



SUMMIT
ENGINEERING

- Structural Engineering
- Building Science
- Forensics,
- Historic Preservation
- BIM Integration

SUMMIT
ENGINEERING

Quality Structural Design,
Construction Administration,
and Inspection Services.

summitengineeringinc.com
603.319.1817

gray marble pedestals that hold columns of green marble with large white veins. Red porphyry columns stand in the conchs that flank the apse and the entrance. In certain locations, mother of pearl rinceau (foliage patterns) are inlaid into black marble and silver, gold, and mosaics are also part of the decorative scheme for the interior of the church.

The character of spatial enclosure boasts of an ineffable beauty, for it subtly combines its mass with the harmony of its proportions, having neither excess nor any deficiency in as much as it is more pompous than ordinary. It is also considerably more decorous than those which are huge beyond measure; and it abounds exceedingly in gleaming sunlight. As a pastor in our tour group concluded, the



The Portraits of Angels on the Arch of the Bema



Partial Interior shots of Hagia Sophia

interior space is not illuminated by the sun from the outside, but rather that radiance is generated within, so great an abundance of light bathes this shrine all around.

Its interiors are richly decorated with artistic mosaics depicting various religious scenes and supported by massive marble pillars. The magnificent part in the architecture of the Hagia Sophia is its impressive central dome, which has diameter of 31.24 meters and a height of 55.6 meters. It miraculously appears weightless due to the continuous chain of arched windows under it, which also served to flood the entire interior with sunlight.

The beauty of the church of Hagia Sophia is perceived as being superior to the firmament....it is not only illuminated by the light of the sun but above all by the light of the “sun of truth” and the transcendent light of the “world of the spirit.” The physical light within the Hagia Sophia is the divine presence made palpable: it is the perceptible manifestation of the divine essence that pervades the sacred space. The level of light seems to be reciprocally related to the colors and materials of its interior decoration.

The Hagia Sophia is a spectacle of great beauty, stupendous to our tour group, to all who visit, and even to those who hear about it.... its breadth and length have been fittingly proportioned that it may, without impropriety, be described as being very long and extremely broad. The opportunities presented were seized and what might have been chiefly a geometric and structural “tour de force” became something much greater. Such can be the strange alchemy of artistic creation. ■



The Mosaics over the Southwestern Entrance (The Horogogion Gate)

Details...

Robert Harbeson AIA and **Adam Wagner AIA** announced the launch of a new Portsmouth, NH based architecture firm, **Market Square Architects**. The firm will focus on residential and commercial projects of varying size and complexity across the region.

“My strong background in design, technical aspects of code and construction and the navigation of the approvals and permitting process, coupled with Adam’s business and project management expertise make us a viable option for businesses, homeowners and developers looking to add value to their team or project.” Harbeson said. “Our goal is to provide great service at a reasonable cost and have a positive impact on every neighborhood and community that we serve.”

Wagner notes that, “Our ultimate goal is to provide the best value to our customers and clients. We want to guide them in the decision making process so that their design choices are based on achieving a stated outcome and goal. For some, the design, approvals and construction process can be a daunting one; we want to be an advocate for those clients and walk them through every step of the process.”

Market Square Architects’ new office is located in suite 203 of the Kearsarge House at 104 Congress Street in Portsmouth. They will serve clients throughout the region and across the 15 states where they are currently licensed to practice.




LANDSCAPE ARCHITECTURE	DESIGN/BUILD
LANDSCAPE CONSTRUCTION	PERMITTING AND LAND PLANNING

phone (603) 763-6423 | www.dblandscaping.com

2030 & Beyond: Sessions 2 & 3

Session 2 — October 5, 2016

8:00 am to 5:00 pm

Manchester Community College

Join us for the second session of this year's 2030 & Beyond Series. We're pleased to present **Joe Lstiburek Ph.D, PE**, for a day-long seminar on Retrofitting Buildings – Mass Buildings vs. Frame Buildings.

The course will cover interior vs. exterior approaches for retrofitting and answer these questions: Is freeze-thaw an issue? Is frost-heave or ad-freezing an issue? Is fire an issue? What is efflorescence and is it an issue? What is done in other countries? What limitations are based on historic preservation?

Joe Lstiburek is a principal of Building Science Corporation and one of the world's foremost authorities on energy efficient construction techniques. He is a noted educator who has taught hundreds of professionals over the past three decades and written numerous books and papers.

Registration and more information at www.aianh.org/news/aianh-events.

7 AIA LU/HSW

Session 3 — November 2, 2016

8:00 am to 5:00 pm

Alumni Center, Keene State College

Our third and final 2016 seminar will be on Key Topics in High Performance Design, Specifications, and Construction, presented by **Peter Yost** of BuildingGreen, Inc.

The workshop builds on the content of the AIA-NH 2030 series. Residential building enclosures today are complex and highly variable, in their design, specification, and construction. This course will move quickly from the basic principles of hygrothermics (how heat and moisture move on, in, and through our assemblies) to the techniques to evaluate conventional and alternative enclosure systems. Participants will learn techniques from projects the instructor has worked on over recent years and then in small groups, participants will employ the same techniques on their own projects.

Attendees will receive an additional 3 months complimentary membership to GreenBuildingAdvisor.com.

Registration and more information at www.aianh.org/news/aianh-events.

7 AIA LU/HSW

Marc Rosenbaum Opens this Year's 2030 & Beyond Series

Text by David Ely AIA, Photos by John Hession



The first of this year's 2030 and Beyond sessions was held at UNH on June 9 with Marc Rosenbaum, PE presenting. I've seen Marc present several times at the Boston NESEA conference and other events, but this one was very special, and I felt that he really was speaking to the needs of NH architects doing residential design.

In his often humorous, down to earth style Marc reminded us of the differences between energy and power – energy is the capacity of a system to do work expressed as BTU or kWh, power is the rate at which that system performs work, expressed as BTU/hour or kW. The average New England home uses about 112.9 million BTU/year for all energy. Peak heating loads can range from 10,000 (super efficient) to as much as 200,000 BTU/hour.

In achieving net zero we have a tendency to assume that if we solve the heating part the rest will be easy. In reality our energy loads fall into 4 basic categories (NIC transportation); heating, hot water, ventilation and “other” (plugs, appliances, etc). Quite often the “other” category can outweigh heating as a factor of lifestyle and number of occupants instead of building area.

He gave a very handy guide to estimate solar array size to offset all energy used:

1.5 kWh/sq ft/yr to heat and cool

200kWh/hr + 450 kWh/person/yr DHW
200-500 kWh/month lights/plugs/appliances

15-25 kWh/sq ft/yr of PV array.

And of course it's Conservation BEFORE Renewables; reduce the load to minimize the array size.

Air barriers must be impermeable to air, continuous, strong and durable; can be inside, outside or within the assembly. A ceiling with OSB and tape is very effective especially if the OSB goes over the top plate and ties into the outside sheathing. Spray foam is another effective air barrier and will not shrink away from framing if properly applied. Air sealing should be blower door tested early during construction while assemblies are open and able to be fixed. In SIPS construction he recommends notching the inside of the panels at joints for a 2" x4" foam spline to effectively stop exfiltration to the exterior skin. A complete set of drawings should include a diagram of air, moisture and thermal barriers.

Several proprietary insulation accessories were discussed including Nudura insulation with integral strapping, HECO Topix Therm 360mm screw for strapping exterior rigid insulation such as Roxul, Fasten Master screws for SIPS, and Hilti IDP fastener for rigid insulation to foundation walls.

He recommends using single larger win-



This 2030 & Beyond Session was held in Kingsbury Hall at UNH. Thanks to Doug Bencks FAIA, University Architect & Director of Planning, and Tracy Kozak AIA, JSA Inc., for their work in securing the space.



Program planners and speaker. From left: David Ely AIA, Carolyn Isaak Hon. AIANH, Sheldon Pennoyer AIA, presenter Marc Rosenbaum PE, and Paul Leveille. AIANH Environmental Guild and AIANH Programming Committee members are the planners of this excellent educational series.

dow units instead of multiple units and ensuring that the testing is NFRC rated – European windows sometimes are not. Alpen (and other) windows have insulated frames and thin films to create triple or quad glazing effect. He recommends opting for high solar heat gain on all sides. Wasco has a triple glazed skylight.

Heat pumps have a high COP compared to other conventional types of HVAC. Mini-split air source heat pumps are now able to produce heat from -15 deg. air. For larger projects multi-zone VRF systems are appropriate. Ventilation is required for tight buildings, using an HRV or ERV like Zender or RenewAire. For domestic hot water a heat pump water heater (Steibel Eltron, GE Geospring or AO Smith Voltex) and PV is usually more practical than solar thermal. They will have a slight cooling effect so must be in minimum 100 sq ft. space.

Grid-tied PV is a widely used system; battery systems are being developed and are useful for demand charge reduction, time of day rate cost savings, back-up power and self-generation if net metering is compromised. Most promising in the near term is lithium-based batteries.

He gave interesting statistics based on measured energy usage of 8 homes with 5

kW arrays on each, and showed % of load served by PV. They include R-20 under slab, R-20 basement wall, R-31 wall, R-50 roof, fiberglass windows with 322 glazing and argon, 117-184 cfm 50 (2 BR 1,251 sf, 3 BR 1,447 sf). Mechanicals include 1.5 ton single zone ASHP, electric radiant panels in BRs and baths, 50 CFM HRV and 50 gal electric DHW. Energy use recorded over 4 years varied from just over 6,000 to almost 14,000 kWh/year with the 5 kW arrays generating an average of 6,840 kWh/year each.

He also used his own home as an example, a deep energy retrofit to NZE from the inside keeping roofing, trim, and most wall shingles intact. Strapping, spray foam insulation, Alpen windows U .16, mini-split heat pump, heat pump water heater, wood stove, and 5 kW solar panels. Most interesting to me was multiple blower door test results after various strategies taking infiltration from 3,117 cfm @ 50 down to 141. He also installed e-monitors on each circuit to give a detailed breakdown of energy consumption. The result is a net positive home. ■

I've seen Marc present several times at the Boston NESEA conference and other events, but this one was very special, and I felt that he really was speaking to the needs of NH architects doing residential design.

2030 & Beyond: SPONSORS



Crown Point Cabinetry
Liberty Utilities
North Branch Construction
Pella Windows and Doors
ReVision Energy

Become a sponsor! Information is on the above website listing.

Details...

DeStefano Architects (DJA) recently welcomed Nicole McNeal, a recent graduate of Endicott College's Interior Design Program, as a full time employee of the firm. Ms. McNeal has longstanding familiarity with DJA's operations, having been a frequent seasonal intern. Nicole's role as an Interior Design Project Manager will enhance DJA's practice. She is currently collaborating with other DJA designers on the new Monarch School of New England High School and Vocational Center in Rochester and interior renovations of the historic Middle Street Baptist Church in downtown Portsmouth. Nicole is also lending her expertise to numerous residential design projects underway at DJA.

Lisa DeStefano AIA, founder and principal architect of DJA served as Nicole's thesis advisor for the year. "She challenged herself in ways that took the project to a higher level than expected" says DeStefano of McNeal's thesis. "I am so excited to see Nicole use her formal education and practical knowledge in her new full-time professional capacity."

Earlier this year, **PROCON** announced three leadership changes. John Samenfeld has been promoted to Vice Chairman of the company. John has 40 years with the Company, most recently as President. Under John's leadership PROCON has grown into a \$200 million fully-integrated design and construction management firm with projects throughout Northeastern United States.

Lance Bennett has been appointed Co-President of the company. Lance has 31 years of experience with PROCON, lately as Executive Vice President of Construction Operations. His oversight of the company's construction management professionals has been a strategic part of the Company's successful progression into more complex and sophisticated projects throughout the Northeast.

James A. Loft AIA is also appointed Co-President of the company. He has been with PROCON for 20 years, most recently as Executive Vice President of architecture and engineering. His leadership has spearheaded the department's explosive growth from four to fifty professionals and has allowed PROCON play an integral role in redefining the industry's design-build paradigm.

AIA New Hampshire House Tour

Next month we'll print some photos of the houses...



The AIA New Hampshire House Tour on June 30 included homes designed by Dan Scully AIA, Sheldon Pennoyer AIA, Susan Phillips-Hungerford AIA, and Jay Purcell AIA. *Photo by John Hession*



It was nice to see sketchers on the House Tour: Peter Hartz and Bob Cook. *Photo by John Benford*



Jeannette Wims, JW Builders; Dale Doller AIA, LBPA; and Liz Hummell, Image 4. *Photo by John Hession*



Andi Axman, *NH Home Magazine*, and Nancy Belluscio, On-Site Photography. *Photo by John Hession*



The Holmes family, shown here, lease the land at Four Winds Farm from Rick and Duffy's family and have brought it back to a working farm. They provided us with a delicious spread from the farm's bounty. *Photo by John Hession*



Board members Alyssa Murphy AIA and Dennis McNeal AIA. Dennis is leaving the area, having taken a position with AECOM in Roanoke VA, and so was recognized for his service on the AIANH Board of Directors. Photo by John Hession



Scott Tirrell, Pella Windows and Doors, Platinum Sponsors for this event. Photo by John Hession



Linda and Frank Brookshire Photo by John Hession



Three of our 2016 AIA NH Architecture Foundation Scholarship winners were recognized during the festivities. From left, William Toohey of Rochester, NH, and Stefan Burnett of Derry, NH, both of whom will enter their fourth year this fall in the Wentworth Institute of Technology architecture program; Lindsey Buyer of Keene, NH, a second year student at Virginia Tech. (See more in the June NH Forum.) Photo by John Hession



Chance Anderson, Architectural Stone, with Chris Williams AIA, CPW Architects. Photo by John Hession



Four Winds Farm. Photo by John Benford



Katie Sutherland AIA and Bob Sutherland. Photo by John Hession

Thank you to our Sponsors of the June 30 House Tour

Platinum



Gold

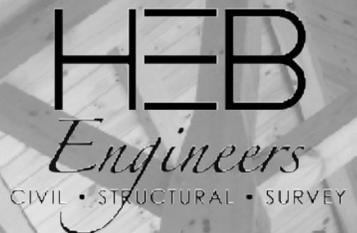


Silver

Loewen Window Center of VT & NH

Sheldon Pennoyer Architects

Working with NH architects since 1974.



www.hebengineers.com
Employee-owned in North Conway, NH

Job Opportunities, Positions Sought

Job listings and positions sought listings are on the AIANH website: www.aianh.org/careers.

To submit an ad, please email ad text to office@aianh.org. Job opportunity listings are free for AIANH members and \$320 for four months for non-members. Listings for Positions Sought are free for everyone. Please include your contact information with your ad listing.

Chapter Meeting at Applecrest

photos by John W. Hession



Our May 26 Chapter Meeting included a tour of Applecrest Farms with a reception and presentation in the orchard, under a tent. Thanks to Stuart Anderson, Assoc. AIA, of ALBA Architects for gathering the team together for the tours and for the presentation.



AIANH President Elect Sheldon Pennoyer AIA; Ken Holmes, North Branch Construction; Bonita Cook AIA, PROCON; and Gabe DiNicola, North Branch Construction.



What you don't know can hurt you.

SAVE YOUR PROJECT FROM THE HASSLES OF FINDING THE UNEXPECTED.



There's no time to waste.
RPF Environmental is a full-service environmental health and safety consulting and testing provider that responds with the most cost-effective and quickest turnaround in the industry.



RPF Environmental
RAPID RESPONSE. TRUSTED RESULTS.

Schedule a consultation today.
1-888-SAFE-AIR
Or visit www.airpf.com.

FIFTY-SEVEN YEARS OF CONSTRUCTION EXCELLENCE

Design by JSA, Inc.



North Branch Construction, Inc.

GBCS Student Success Center
Portsmouth, NH

www.northbranch.net • (603) 224-3233 •    

Providing a level of value, quality, and service that is unrivaled in the construction industry.



Project team: Applecrest Farm owner Peter Wagner, Peter Middleton, Martini Northern; Stuart Anderson Assoc. AIA, ALBA Architects; Alex Azodi PE, Omega Structural Engineering, Philip Bennett AIA, ALBA Architects, and Todd Wagner, Applecrest Farms owner.



Thank you to our Sponsors of the May 26 Chapter Meeting at Applecrest Farms

Platinum

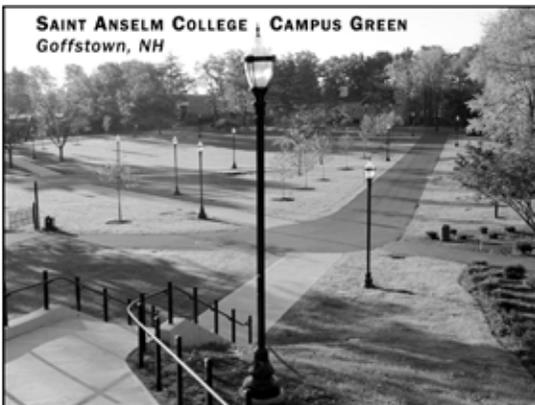


Gold



Green

R.W Gillespie & Associates, Inc



SAINT ANSELM COLLEGE | CAMPUS GREEN
Goffstown, NH

TFM Design
Landscape Architects

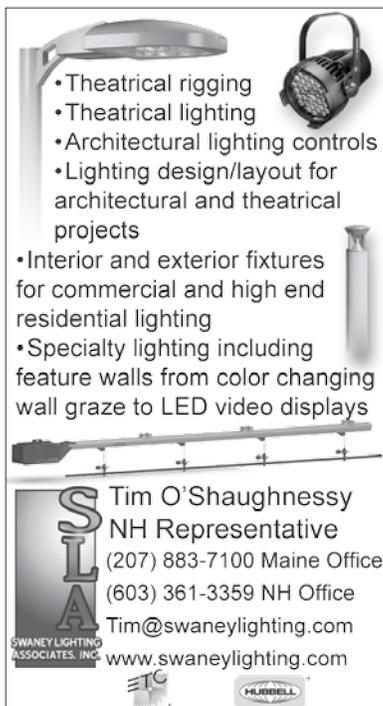
*Creating sensitive and thoughtful
land planning and landscape plans.*

CONTACT: Anne Cruess, PLA - Chief Landscape Architect
(603) 472-4488 www.tfmoran.com
TFMORAN, INC. 48 CONSTITUTION DRIVE, BEDFORD, NH
MSC DIVISION, PORTSMOUTH, NH www.msceengineers.com

Details...

Dennis Mires, P.A., The Architects, was recently recognized with two awards. Their Family Resource Center and Shelter for Families in Transition (FIT) in downtown Manchester received an honor award from **PlanNH** at their recent meeting on June 22. The Architects provided an energy conserving second floor addition to an underused existing building in the heart of the City to support FIT's vital program. In addition to providing an emergency shelter for families, the Center provides a range of support services with community partners including job training and placement, a feeding program, legal assistance, trauma-informed pre school education, health services, clinical services and more. A broad based fundraising effort from the Community helped make this project a reality. Hutter Construction completed the project on time with an aggressive schedule and within budget.

The firm's completed library addition for the Byron G. Merrill Library in Rumney, NH, was recognized by the **NH Preservation Alliance** for compatible new construction. The addition provided full accessibility to this two story building including accessible toilet room, book stacks and meeting room. The sensitive addition to this historic library in the village center enhances the use of the facility without compromising its historic character. Conneston Construction Inc, was the Construction Manager.



- Theatrical rigging
- Theatrical lighting
- Architectural lighting controls
- Lighting design/layout for architectural and theatrical projects
- Interior and exterior fixtures for commercial and high end residential lighting
- Specialty lighting including feature walls from color changing wall graze to LED video displays

Tim O'Shaughnessy
 NH Representative
 (207) 883-7100 Maine Office
 (603) 361-3359 NH Office
 Tim@swaneylighting.com
 www.swaneylighting.com

SWANEY LIGHTING ASSOCIATES, INC. ETC HUBBELL

DESIGN AWARDS *Con'td from page 1*

ing the Manchester-Boston Airport.

- Publication of award-winning projects is sought by AIANH; a press release and photos are sent to all New Hampshire periodicals.

We are happy to announce that we will continue the new Small Projects/Small Firms category, introduced last year. Projects up to 1500sf are eligible. Firms must have no more than five employees, including owners and principals. Projects can be a small building or even part of a building, say a porch addition, or a kitchen renovation. What have you done that is unique, superbly designed, and small? Submission fees in this category are \$50 per project. Submission requirements are the same as for the regular Design Awards program.

The AIANH Design Awards Gala will be on January 20, 2017 (snow date January 22) at the Manchester Country Club in Bedford. Platinum Sponsors for the 2017 Design Awards program are **Spaulding Brick Co. and Charron, Inc.** Gold Sponsors are: **Marvin Windows & Doors.** Silver Sponsors: **Crown Point Cabinetry, Liberty Utilities, North Branch Construction, ReVision Energy.** Our Media Sponsor is **NH Home Magazine.**

If you are interested in a Gold or Silver sponsorship, please contact the AIANH office, 603-357-2863, office@aianh.org.

Find out all the details about entering at: www.aianh.org/content/design-award ■

KASTEL *Continued from page 1*

of Texas at Austin, Bonnie began her career in Paris as a photography conservator at the Musée Carnavalet. It was during this time in Paris that she first worked with architects, providing graphic design and presentation services to firms. She is looking forward to getting back to these earlier roots as a public champion of building design in the state of New Hampshire.

Also see the President's Perspective on page 2 for more information. ■

NAZAKA *Continued from page 3*

stone floors surrounded by concrete walls with images of the jungle or icebergs painted on them. There has to be a solution that has a better play between creating an environment where animals can thrive, and also be studied or protected. Finally, in a world where sustainability and environmentally conscious building practices are being pushed harder and harder, who or what are we ultimately designing for? Hopefully, it's not solely with the human in mind.

Please see the side bar on page 3 about a special event for aspiring architects and students. ■

THE ARCHITECTS' CHOICE SINCE 1933

Spaulding Brick Co., Inc.



28 Daniel Plummer Road
 Goffstown, NH 03045
 603-647-8442 Fax 603-647-8439

5 Lopez Road
 Wilmington, MA 01887
 617-666-3200 Fax 617-625-8110

250 Station Street
 Cranston, Rhode Island 02910
 401-467-2220 Fax 401-467-2359

when design matters



portsmouth, new hampshire since 1993
www.terrafirmalandarch.com 603-430-8388

Construction Summary

Project Type: Energy Recovery Unit & Ventilation (Hyde Hall South Wing Offices) (Plymouth State University)
Cost: \$387,900
Location: Plymouth, NH
Owner: Plymouth State University
Architect: Misiaszek & Turpin
Engineer: Rist Frost Shumway Eng.
Gen. Cont.: Structure Tone

Project Type: Garrison Elementary School Facilities Study
Location: Dover, NH
Owner: Dover School District-SAU#11
Architect: Harriman Architects & Engineers

Project Type: Babcock House Kitchen Up grades (UNH)
Cost: \$708,693
Location: Durham, NH
Owner: University System of NH
Architect: Harriman Associates
Engineer: Harriman Associates
Gen. Cont.: Structure Tone

Project Type: Refrigeration Rack System Renovation (UNH Stillings Dining Hall)
Location: Durham, NH
Owner: University of NH
Architect: Harriman Associates
Const. Mgr.: Milestone Engineering & Construction

Project Type: Hyde Hall Entry Ramp
Cost: \$435,323
Location: Plymouth, NH
Owner: University System of NH
Architect: Cowan/Goudreau Architects
Gen. Cont.: Structure Tone

Project Type: Hannaford Supermarket Remodel
Location: Goffstown, NH
Owner: Hannaford Brothers Inc.
Architect: Harriman Associates
Gen. Cont.: Fulcrum Associates

Project Type: Park Theatre
Location: Jaffrey, NH
Owner: The Park Theatre
Architect: BKA Architects, Brockton MA
Engineer: TF Moran
Const. Mgr.: Hutter Construction Corp.

Construction Summary is provided by Construction Summary of NH, Inc. 734 Chestnut St., Manchester, NH 03104

Project Type: Dover Arena Locker Room Renovations & Addition
Cost: \$344,672
Location: Dover, NH
Owner: City of Dover
Architect: DeStefano Architects
Engineers: Engineered Building Systems, Petersen Engineering, Summit Engineering
Gen. Cont.: Pine Brook Corp.

Project Type: Long Term Care Space Allocation
Cost: \$316,574
Location: Brentwood, NH
Owner: Rockingham County
Architect: Warrenstreet Architects
Const. Mgr.: Milestone Engineering & Construction

Project Type: Chandler Place Apartment Building (39 Apartments)
Location: Plaistow, NH
Owner: Chandler Place LLC
Architect: Burnell Johnson Architects
Const. Mgr.: Gary Chicoine Construction

Project Type: HVAC/Electrical Technology Laboratory Building (Manchester Community College)
Cost: \$5,500,000
Location: Manchester, NH
Owner: Community College System of NH
Architect: Lavalley/Brensinger PA
Engineers: TF Moran, Fitzmeyer&Tocci Associates, Foley Buhl Roberts & Assoc-
Const. Mgr.: Bauen Corp.

Project Type: Community Correction Facility
Cost: \$7,300,000
Location: Laconia, NH
Owner: Belknap County Commissioners
Architect: Sheerr McCrystal Palson Architecture Inc.
Const. Mgr.: Bauen Corp.

Project Type: Assisted Living Facility (Residence At Silver Square) (76 Units)
Location: Dover, NH
Owner/Dev.: LCB Senior Housing LLC
Architect: The Architectural Team, Chelsea MA
Engineers: Allen & Major Associates, Wozny / Barbar & Associates Inc., DM Berg Consultants PC
Const. Mgr.: Eckman Construction

AIANH Corporate Allied Partners

Platinum



Gold



Silver

PROCON

For information on our Corporate Allied Partner program (CAP), please contact Carolyn Isaak, office@aianh.org, 603-357-2863.

Calendar of Events

Aug 11 ABC/AIA Seacoast Harbor Cruise & Networking Reception, Portsmouth, 6:00pm-9:00pm. Join your industry peers for an evening of ABC & AIA Networking on the Isle of Shoals Steamship Company's MV Thomas Loughton. More information and registration. Info: www.aianh.org/news/aianh-events

Sept 22 Net Zero in New England, Red River Theatre, 5:30pm to 8:45pm. **AIA New Hampshire and Plan NH** are pleased to announce the preview of John Hession's film *Net Zero in New England* (a project of the New Hampshire Environmental Guild and the NH Architecture Foundation, the educational foundation associated with AIANH.) The evening will open with three short films, the first two show how Net Zero Design has been implemented in two projects, the Tin Mountain Conservation Center and a Canterbury residence. A third film will show how architects in New England have achieved significant results by making integrated design a mainstay of their design process. A panel discussion will follow the films. **1.5 AIA/HSW**. Info: www.aianh.org/news/aianh-events

Sept 29 NCARB & You: AXP, ARE, and Certification, Lavallee Brensinger Architects, 5:30pm to 7:30pm. **AIA New Hampshire** brings the **National Council of Architectural Registration Boards (NCARB)** to present on a range of licensure topics See page 3 for more information.

Oct 5 2030 & Beyond: Retrofitting Buildings – Mass Buildings vs. Frame Buildings, Manchester Community College, 8:00am to 5:00p, with **Joe Lstiburek Ph.d., PE**. Second session of this year's AIANH 2030 & Beyond series. More information on page 8 and www.aianh.org/news/aianh-events. **7 AIA LU/HSW**

Oct 19 AIANH's ARCHtoberfest, with AIAVT, 5:30pm to 8:30pm, Harpoon Brewery, Windsor, VT. Join us for our third ARCHtoberfest, this year with AIA Vermont members joining us. We'll go to Harpoon Brewery in Windsor, VT. More about the event is forthcoming, as well as registration. Info: www.aianh.org/news/aianh-events

Nov 2 2030 & Beyond: Key Topics in High Performance Design, Specifications, and Construction, Alumni Center, Keene State College, 8:00 am-5:00 pm, with **Peter Yost**. Third session of this year's AIANH 2030 & Beyond series. More information on page 8 and www.aianh.org/news/aianh-events. **7 AIA LU/HSW**

Sponsorships

for the two remaining **2030 & Beyond** sessions, the **September, October, and November Chapter Meetings**, and the December **Catch-Up CEU Day** are available.

Please contact Carolyn Isaak, office@aianh.org, 603-357-2863.



AIA New Hampshire

310 Marlboro St. 2nd Floor
Keene, NH 03431

Address Service Requested

Presorted Standard
US Postage
PAID
Permit No. 9
Jaffrey, NH

Printed on Recycled paper

Photo of the Month



The Western entrance archway to St. Mary's Cathedral in Edinburgh, Scotland. The cathedral was built in the late 19th century in the West End of Edinburgh, designed in the Gothic style by Sir George Gilbert Scott.

From Rhiannon T. Laurie of New Durham NH, currently with Norman Fosters in London.

Do you have an interesting photo? Why not send us one to print? 300 ppi jpegs, approximately 4 x 6 inches, BW or color. (photos are also posted on the website at www.aianh.org/news/photo-of-the-month.) Send along a title, caption, and your name, to office@aianh.org.