



Find us online
twitter.com/phcnews
facebook.com/PhcNews

HYDRONICS

Boiler Report

p 62

PLUMBING

Grease Interceptors

p 92

MECHANICAL CONTRACTING

Inside Weldbend

p 120

phc

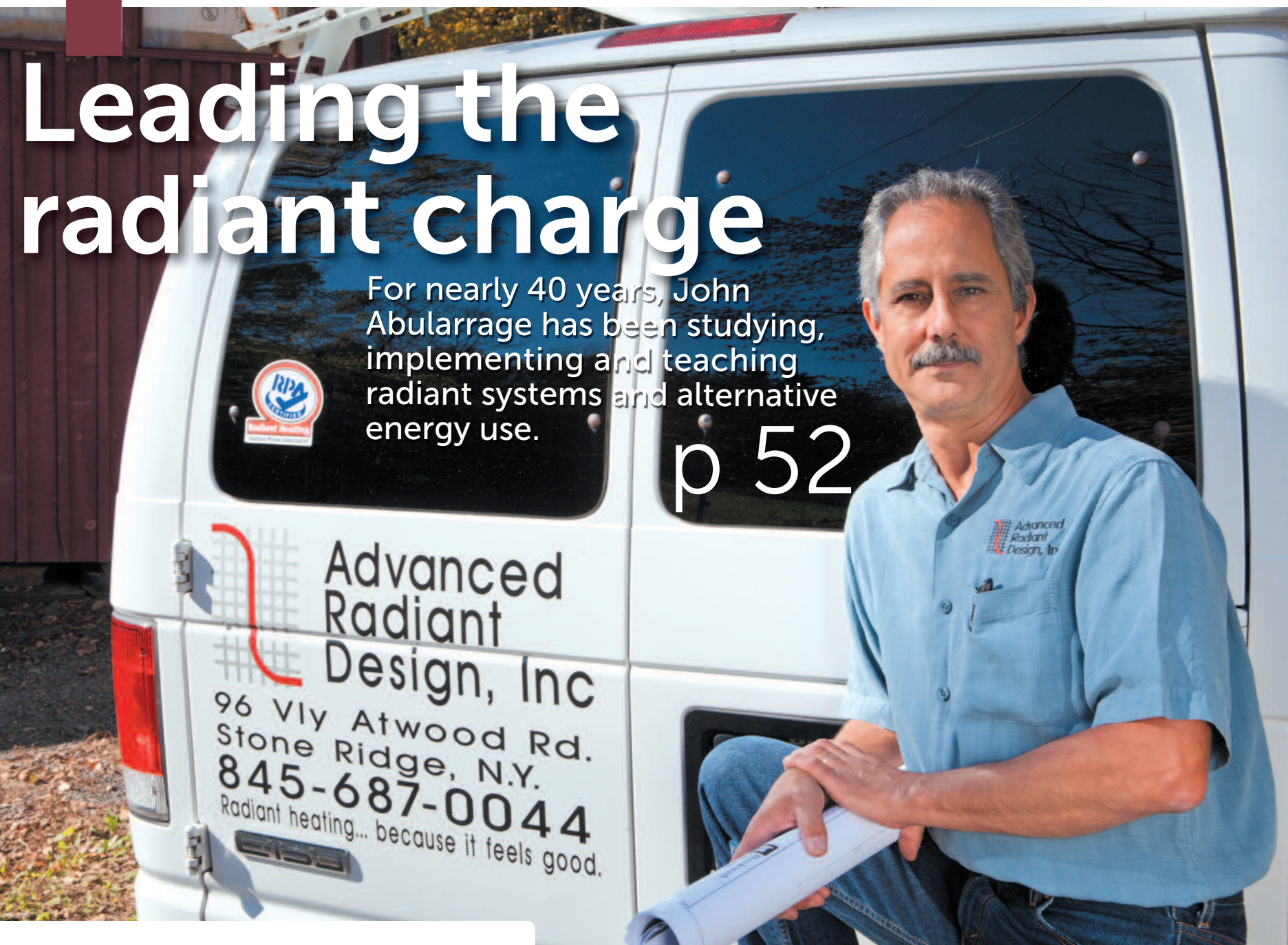
plumbing + hydronic contractor

news

Leading the radiant charge

For nearly 40 years, John Abularrage has been studying, implementing and teaching radiant systems and alternative energy use.

p 52



may 2012 Vol 12 | No 5

phcnews.com



Scan with your smart phone or visit online at
qr.qg.com/HZLLJd to renew your subscription
to *Phc News* today!

HYDRONICS

| CONTRACTING IN THE CATSKILLS | BY JOHN VASTYAN

Renewable energy/hydronic explorer inspired by challenge

There's another side to each of us, a part of our being that we know and enjoy the company of, but purposefully subdue. For some, it's a carefully-guarded secret. For others, the "other self" isn't really separate at all; it's the kid who rides shotgun, grinning widely, filled

in for a beautiful drive. John's shop is in the high country, which, by my standards, is absolutely drop dead gorgeous. I like lakes and trees; lots of each. Driving through this terrain with frequent, misty waterfalls, you learn quickly why it's just short of magic for those who live here.

developed and tested solar thermal panels. At one of their seminars, John met Mike and Dan Chiles who were based in Springfield, Mo. and distributed Bio-Engineering products just prior to the emergence of Heatway.

In '81, John left Bio-Energy to form the consulting group Aeolian Institute of Research, where he was busy with passive and active solar design analysis for architects, engineers and radiant heat system designers.

Eventually, Morty went to work for Heatway. Four years later, John opened Energy Efficient Systems, one of the first radiant heat installation firms on this side of the Atlantic. He also dove deeply into heat recovery and energy management systems (Whoa: This is 1981, folks). It was also a period of self-discovery, one that spanned

The kid who travels with him

several years as he entered, exited and re-entered SUNY. John's migration took him to Colorado State University, to a commune in Eugene, Oregon, and into solar thermal manufacturing in Boulder, Colorado.

In 1983, at Morty's encouragement, John completed his college education at SUNY, chiefly through an independent study program that he helped to craft and title, resulting in a B.S. degree in solar design and analysis. It was a rigorous program, a math-loaded cocktail of alternative energy, mechanical engineering and physics study and field research.

Memorable jobs at Energy

➔ Continued on p 54



John's shop is in the drop-dead gorgeous New York high country.

with expectancy.

John Abularrage — that unstoppably smiling guy — is to the solar and radiant heat realm what Jacques Cousteau was to early underwater exploration. Back in the 70s, John was diving deeply into the science of solar thermal energy.

Today, he's an energetic entrepreneur, mechanical guru, mentor to young technicians and, easily more important, the steadiest and most involved father and husband a family could ask for.

Though his family is his greatest accomplishment, John's energies, inspirations and dedication to family and mechanical craft leave a wide wake with no debris. Clean and uncluttered, it's a path easy to follow, filled with radiant warmth.

The back country

To find John's firm, Advanced Radiant Design Inc. (ARD) in the forests of Stone Ridge, N.Y., you're

Sylvia Tinti, the ever-vigilant office and team manager, is the female energy behind a gaggle of industrious men, and keeps the office running "like a well-maintained German automobile."

Early years

Spurred by the Gulf Oil Crisis of '73 that shook the foundations of the developed world, John turned his attention to studying alternative energy. In '75, as a student at the State University of New York (SUNY), New Paltz, John met Morty Schiff — instructor, physicist, inventor and alternative energy pioneer.

John and Morty formed a friendship that led to decades of mentoring, study and enterprise. In '79, John joined

Morty at Bio-Energy Systems where, in the R&D lab under Morty's direction, John developed algorithms for measuring radiant heat emission and heat transfer in slabs. They also



HYDRONICS ➔ Continued from p 52

Efficient Systems included an expansive, radiant root-zone heating system in a series of commercial greenhouses and an 8,000-sq.-ft., all-radiant home in Woodstock. And it was in '85 that, almost overnight, the price for fuel oil plummeted and solar energy tax credits ended.

Home at last

"We couldn't sell solar or energy recovery systems, and any suggestion of energy management went right out the window," explained John. Radiant heat moved to a comfort sell. John worked closely with then-Woodstock New Yorker Paul Pollets, struggling to convince architects and builders of radiant's added value. Gradually, the business grew, and John found the 72-acre property on Vly Atwood Road just six miles west of Stone Ridge, waterfall and post n' beam barn included.

For John — inventor, scientist, naturalist, engineer and solar/hydronic/radiant-systems designer and installer — it was the perfect place to build a home and house the business. Perched among towering conifers, the 150-year-old barn was eventually renovated, making a great nest for solar and hydronic fabrication.

But home was yet to be experienced at its fullest there on the property. After months of pursuit, John danced into Leslie's heart, a woman of rare qualities who, he hoped, would become his wife. John is an intrepid explorer, ever with a nose to the wind and an oar in the water. So it comes as little surprise that his greatest mountaintop experience happened at 14,000 feet at the top of the Kali



Advanced Radiant Design's work is about 80% higher-end residential new construction and renovation, while commercial work (including a Buddhist monastery) accounts for 20% of revenue.

Gandaki Gorge in Nepal, 1993. It was there, in a Buddhist shrine, that John proposed to Leslie. Her smile and embrace, 7,500 miles from the house they've since built in Stone Ridge, was the signal he'd hoped for. Today, the Abularrage family includes Nile, 16 and Tara, 13.

Overkill is underrated; it's all about the team

The barn in the woods has morphed into a comfortable base of operations for Advanced Radiant Design, the company that, in '98, grew from Energy Efficient Systems. Now with seven full-time employees, ARD serves the greater Hudson Valley, focusing on radiant heat and all things hydronic that connect to it, sometimes incorporating solar thermal and geothermal.

"Overkill is underrated" is the motto here. Take a look inside the shop and you'll see why this small firm has made such a huge impact in the market.

Mike Cahill, with 30 years of industry experience, is the all-wise job foreman and shop manager. Prior to his seven years with ARD, Mike served as head of maintenance for an institution, where he honed his expertise as an electrician as well. He is the go-to controls expert. A few years ago, the other guys hung a "WWMD" sign above Mike's work area as a reminder of sorts. The meaning: As they ventured into the marketplace they should consider, "What would Mike do?"

Sylvia Tinti is the ever-vigilant office and team manager. The old adage, "Behind every great man is a great woman," pales when applied to Sylvia. Rather, says John, "Sylvia is the incredibly great woman behind a gaggle of great men." Her German heritage helps to explain a rare strength of character. With her meticulous attention to detail,

Mike Cahill, "all-wise" job foreman and shop manager with 30 years of industry experience, also is the go-to controls expert.

leaving no stone unturned, Sylvia keeps the office running like a well-engineered and maintained German automobile.

Dave Bauer, lead installation technician, is the ultimate, fast-track, it's-in-his-DNA mechanic. The first sound he heard as an infant was the fiery roar of a dragster. Dave's stroller was routinely moved between the house and the drag strip. As a toddler, he clutched a wrench with the greatest of ease and,



Bobby Witte, assistant mechanic, is the "quintessential apprentice," a gifted and inspired young tech with loads of talent on tap.

no surprise, Dave now has an innate, intuitive sense of the mechanical world and the way things work within it. He especially enjoys the art of heat distribution and mechanical room layouts.

Bill Delamater Jr., assistant mechanic. As he was growing up, Bill often heard from his father, "If there's a will, there's a way." Having invoked those words a few times on the job, the other guys remodeled the saying as it applies (just) to him: At ARD, it's now, "If there's a Bill, there's a way." Perhaps his military experience honed his talent as a steady, deliberate problem solver. No obstacle is too great for Bill. Consider him the Clint Eastwood of the group; whatever the need is, he'll get it done.

Al Bruno, service manager, was mentored into the trade by his father and is now a dyed-in-the-wool, second-generation tradesman. So it only makes sense that, today,

➔ Continued on p 56



Mike Cahill

HYDRONICS ➔ Continued from p 54

he's the mentor. In addition to his work at ARD, Al's been a vocational instructor for New York's Board of Cooperative Educational Services (BOCES). In fact, Dave Bauer was once a student there who later asked about Advanced Radiant Design; the rest is history. Al's trouble-shooting skills are epic. His composure, determination and sense of focus under stress – like an advancing Marine.

Bobby Witte, assistant mechanic. It's John's opinion that Bobby is the

"quintessential apprentice." Bobby was first inspired by the trade in a BOCES class. He later earned a two-year HVAC degree and, one day, decided to knock on the door at ARD. At the time, the market was way down, but, given some jobsite labor tasks, he quickly won approval among the team. Bobby's eyes are wide open; he's passionate about his work and his ability to contribute. He's uncommonly driven and, when there are things to be learned, Bobby's a sponge. He's a gifted and

inspired young tech with loads of talent on tap.

John Abularrage — owner, proprietor and proud shepherd to a flock of inspired, innovative and self-motivated folks who eagerly accept the challenges of each new day.

"Everything we build is designed and drawn in-house," explained John. "We especially like to control and integrate multiple systems and sub-systems, bringing tight attention to all facets of the installation. We may occasionally be guilty of overkill, but we also share comfort in knowing we've given each job our very best."

Typical jobs? Well, there aren't any. Recently, crews struck out to finish a 1,200-sq.-ft. retirement home with three zones of radiant in a slab served by a small wall-hung boiler. That same day, John stopped in to check on an elaborate hydronic system they'd just completed at a 50,000-sq.-ft. Buddhist monastery. Four staged boilers feed heat to 15 miles of in-slab radiant tubing. Their work is predominantly higher-end residential new construction and renovation (80%). Commercial work accounts for 20% of revenue.

"We offer 24-hour service for everything we install, with a preference for annual maintenance contracts," John added. "Every van has all of the key parts for the boilers we sell. We diligently track our parts inventory."

In memoriam

John's relationship with Morty Schiff began in 1975; soon he was working for the man. He treasures his decades of close relationship with Morty, who ended his professional career as John's employee at Advanced Radiant Design. The circle was complete for Morty who, six years ago, succumbed to prostate cancer. "I owe so much, both professionally and personally, to a really great man and a fine, fine mentor and friend," says John. ●

Energy. It's a New Frontier.

Get Connected!

59th Annual Convention & Trade Show
May 20-24, 2012 • Providence, RI

Scan for the latest 2012 Convention and Trade Show updates!

Open to ALL Trades

FREE NORA & NATE CEUs

www.ThinkOESP.org

It's the industry's premier opportunity for VALUABLE EDUCATION, exciting NEW PRODUCTS and stimulating PEER-TO-PEER EXCHANGE.