

THE NEWSLETTER OF UTAH'S HVACR INDUSTRY

153 SOUTH 900 EAST, #3 • SLC, UT 84102 • WWW.UTRMGA.ORG

SEP/OCT 2018

Fall Tech Training • Oct 24 • Combustion Analysis

AS WE HEAD INTO FURNACE turn-on season, RMGA is fortunate to have **Mark Muhonen** with Vista Sales Associates in Golden, CO come to Utah and **provide RMGA HVAC Technicians** with a two-hour Combustion Analysis course from 5-7 PM on Wednesday, October 24 at Hercules Industries, 475 N. Billy Mitchell Road, SLC, UT 84116.

Each attendee gets 2 hours of core continuing education, a big dinner and a chance at great raffle prizes for \$25, and only \$30 if we record your 2 CE hours with DOPL. Thanks go out to the Division of Occupational & Professional Licensing for partial funding from a 1% surcharge on all building permits. **Call the RMGA office at 801-521-8340 to sign up!**



RMGA Members Needed for 2018 Pathways to Professions

JOIN RMGA IN AN HVAC PAVILION at the **Pathways to Professions Showcase** on October 16-17 at the Mountain America Expo Center, where over 120 Industry and 90 Education partners will participate in a 2-day event aimed at expanding the workforce pipeline for construction trades, and other industry careers.

Over 9,000 high school students will be bused to the Expo Center to meet with industry leaders, HVACR technicians



and education partners to learn more about education requirements, job demands and potential salaries for a

myriad of career opportunities.

RMGA will have a booth and we invite member companies to send HVACR Technicians to come and meet the students and explain in more detail what careers in HVACR look like. Last year, multiple job offers were accepted at the event. RMGA will have giveaways and skill testing activities to engage the students. We need you to send your HVACR Technicians that can talk a young person's language to help work the RMGA booth. They can sign up for 2 - 4 hour time blocks.

Call the RMGA office 801-521-8340 to get involved.



2018 Compensation Survey: We Need Your Input!

RMGA IS TRYING A SECOND TIME to get enough member companies to send in a 2018 Compensation Survey (see insert) to have statistically reliable information to assist our members in better understanding current compensation trends in Utah, including average hourly wages, benefits and other customer billing information.

FOR THOSE WHO HAVE NOT RESPONDED YET: Please answer the survey questions and return your responses to RMGA by September 14. All responses will remain anonymous and held in strict confidence, with only aggregate numbers reported to our members.

MESSAGE FROM THE PRESIDENT

Ryan Rentmeister ryan@rentmeister.com 801-807-9901

RYAN RENTMEISTER



Dear RMGA Members & Friends,

I hope all is well for each and everyone of you.

The RMGA has been busy over the last several months. Some of the things I will report on later when we get things put together. We are working hard to provide additional training

opportunities for you and your employees. We really encourage you to take advantage of the tech colleges. They are a vital part of our organization.

The southern end of the state has always been a challenge for us to train and certify techs and also with enforcement, so more companies see the value of RMGA certification. The board has approved to hold a class down in Saint George at a minimum once a year starting this fall. Details are being worked out and will follow soon. We also want to work with the local building officials to get them trained. They can be our front lines to help DOPL see what is going on. We will also be working closely with Dixie Tech to improve their teaching of the RMGA training material. This will help prepare the students to take the test easier. We will continue to out reach through the whole state to help give you what you

need.

I am thankful for those of you that express your concerns and help come up with solutions. Because of one plea from my friend Jason Tanner, Southern Utah will be served better by the RMGA. Please feel free to send us your comments on how we can improve. Better yet get involved with us. We have several openings on committees. That is a great way to help and know more what's going on inside the RMGA.

Thank you for your help.

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RMGA 2018-2019 OFFICERS & BOARD MEMBERS

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SEP/OCT 2018 3

RMGA EDUCATION CLASSES

New Pre-test Evaluates Technician Readiness

CERTIFICATION CLASSES Now Three Full Days of Training

RMGA certification classes are now three full days of instruction, with all testing administered at Technical College testing centers across Utah. RMGA test vouchers will be issued to each student to cover the cost of their first test attempt and testing fee.

RMGA has posted an online certification pre-test to help determine a technician's readiness and likelihood of passing the RMGA Certification Exam. Go to www.utrmga.org.

GAS CERTIFICATION CLASSES

Salt Lake City

Friday, September 14, Saturday, September 15 & Saturday, September 22 8 am - 5 pm

All classes will be held at: Dominion Energy CTC Training Room 1000 West 100 South, SLC, UT \$395 per person Price includes books shipped, 10 online videos, testing fee and 3 lunches

Salt Lake City

Friday, November 2, Saturday, November 3 & Saturday, November 10 8 am - 5 pm

All classes will be held at: Dominion Energy CTC Training Room 1000 West 100 South, SLC, UT

\$395 per person Price includes books shipped, 10 online videos, testing fee and 3 lunches

Call 801-521-8340 to register for all classes

Partial funding of RMGA training programs have been provided by the Division of Occupational & Professional Licensing from the 1% surcharge funds on all building permits.

New RMGA Certification Class Policy

ACCESS TO THE RMGA ON-LINE VIDEOS and a technician's "free exam retake" **is limited to six months** after the last training day of their Certification class. For example, Technicians who take the September 14-15, and 22 RMGA Certification Class have until March 22, 2019 to access the on-line videos and use their test retake voucher.

If a technician who previously took an RMGA Certification class wants to take the class again, he pays only \$125. If the technician has an old study guide (prior to September 2018) and wants a new one, the cost is just \$25 for all new tabs and text pages, and the technician simply reuses their current binder.

If you signed up for an RMGA Certification Class and need to cancel, you can for free, one week before the class start date, and the technician can take the class at a later date. **Cancellations less than one week before the class are subject to a \$125 fee.** Discretion is allowed for major emergencies.

MECHANICAL CODE DISCUSSION

Internal Loads— Impact on Load Calculation

As we continue the discussion on the Manual J, D and S code requirements for proper residential HVAC design, this issue will focus on internal loads. The sensible (heat) and latent (moisture) loads produced within a home directly impact the total cooling load. Manual J defines **Internal Loads** as *the sensible and latent loads generated by occupants, appliances, lights and plants.*

Considering the heat and moisture we add to a home by living in the structure, obviously we must account for these loads in the sizing of the air conditioner, but should we also include in the heating load, possibly reducing the furnace size? Answering this with another question; what time of day do we have the maximum heat loss, the coldest time of the day? Early morning, just before sun rise, when we typically generate the smallest internal load. No, we do not subtract internal heat gain from the heat loss calculation.

APPLIANCE LOADS

Manual J, Section 22, Internal Load Procedures provides two options to calculate the **appliance** loads. First is *Default Appliance Loads*, where general estimates are made. Summarizing several items:

Kitchen – refrigerator, range with hood

1200 Btuh

Kitchen – refrigerator, range, dishwasher, vented dryer, clothes washer 2400 Btuh

- Adjustment no range hood, cooking, washing late afternoon +850 Btuh
- Adjustment large family using TV, Audio, computers, laundry +1400 Buth

supply and exhaust airflow rates.

The second option is *Custom Internal Loads Estimate*, where each appliance used in the home is listed with Btuh produced by continuous use **and** the percent used per hour. Example:

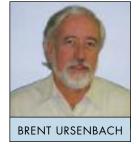
- Coffee maker brewing Sensible Btuh – 1331 Latent Btuh – 717 % use/hr. 0.25
- Coffee maker warmer Sensible Btuh – 155 Latent Btuh – 84 % use/hr. 0.50
- Refrigerator 16 cubic feet

Sensible Btuh – 1000 % use/hr. 1.00

As it's impossible to guess the type, number and usage of appliance in a home, the default method is typically the quickest, and safest method. Simply make a decision, adding reasonable appliance loads, based on the size of the house and number of laundry rooms.

OCCUPANT LOADS

It's recommended to count the number of bedrooms +1 for the number of



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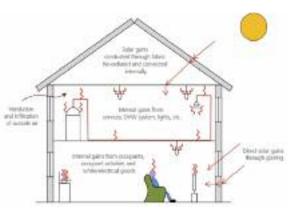
occupants. If you know it's a large family, count two for every bedroom. Do NOT add 25 people because there may be a big group on Thanksgiving – open a window. For homes where the homeowner regularly entertains with large groups, recommend a mini-split to pickup that occasional bump in the load, or a separate system or zone.

Load per occupant:

- 230 Btuh Sensible
- 200 Btuh Latent

OTHER INTERNAL LOADS

Large numbers of plants – latent load



- Steam rooms and saunas
- Heat pump water heaters (do not install inside the home)
- Craft or workshop rooms with heat producing equipment

Take the time to review this section in Manual J for additional direction, and resist exaggerating internal loads. *Please respond with comments or questions. bursenbach@gmail.com*

Meet and Get to Know: LANE ROSE

Q. What is your position within your company?

A. Assistant Director of Facilities Management.

Q. When you were a child, what did you want to be when you grew up?

A. Mountain Man.

Q. Why did you become an HVACR contractor?

A. I believe that HVACR is the heart and center of any commercial building to residential homes, and wanted to know more about this industry that keeps these structures alive and comfortable.

Q. What was your first or most unusual HVACR experience?

A. My first experience was jumping out a t-stat wire in order to get heat inside newly constructed houses we were working in.

Q. What are your favorite aspects of your job?

A. Poing something different every day.

Q. As a new RMGA Board Member, what would you like to accomplish?



LANE ROSE & FAMILY

A. I hope to bring a little different perspective with the experience inside my world of HVACR, half of which is customer oriented.

Q. If you weren't an HVACR contractor, who do you think you would be?

A. Probably some other type of construction contractor.

Q. What is a motto that you live by?

A. It's never as simple as you think.

Q. If you could travel anywhere in the world, where would you go?

A. Alaska.

- **Q.** What is your favorite dessert?
- A. Wife's fresh baked cookies.

Q. If you won a 5 million dollar lottery, what would you do first?

A. Buy land.

Q. What is your favorite movie?

A. I don't really have one.

Q. If you could invite any three people to dinner (dead or alive), whom would you invite and why?

A. Anyone of the Ancient Age time era so I could know what life was really like back then. Anyone from the future 500-1000 years from now — So I can know what life will be like then. And Chef Gordon Ramsay—so we can all eat well!

Q. People would be surprised to know...

A. Not much, I am a pretty straightforward kind of guy.

Lane Rose is with Davis County Government. He can be reached at Irose@daviscountyutah.gov.

Advertise in RMGA PIPELINE! This size ad for only \$120 Call Duane Hill @ 801-521-8335 to reserve your space!

WELCOME NEW RMGA MEMBER!

DANIEL MAYNARD Woodbury Corporation 2733 E Parleys Way Salt Lake City, UT 84108 801-759-4895 d_maynard@woodburycorp.com

Ask The Expert

VICKI LAPLANT SERVICE ROUNDTABLE

Question:

What is a KPI and why pay attention to them?

Answer:

CONTENT

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KPI means Key Performance Indicator. The most successful HVAC companies strive to hit certain KPIs in order to ensure good profits, sustainable cash flow and continued growth - all requirements for a stable, forward-looking company.

KPIs are dependent on the primary type of work the company does. For example, an HVAC company that does 80% residential replacement will need to have a higher target for its overhead KPI than a company that does 80% commercial. For example, a residential focused company would

rely more on advertising to generate business, rather than personal relationships, which increases advertising expenses.

KPIs to Watch in Residential Replacement

- Installation KPIs Direct Costs to Sales
- Installer direct payroll cost is 10% or less of installation sales
- Equipment cost is 25% or less of installation sales
- Materials cost is no more than 13% of installation sales

These KPIs provide red flags when costs are out of control. For example, if installers are taking too long on jobs, salespeople aren't accounting for enough labor when estimating a



job, or maybe inventory used on jobs is not returned to stock. If these KPIs are not met, pricing may be too low or too many standard equipment jobs are being sold requiring approximately the same amount of labor as higher efficiency equipment that produces higher prices and higher gross margins.

Service KPIs — Direct **Costs to Sales**

Technician direct payroll cost is 22% or less of service

Parts cost is no more than 20% of service sales

If your company is not hitting



service KPIs, it could be the diagnostic fee is too low or not being collected; it could be the street rate for labor in flat-rate tasks is too low: maybe the technicians are not selling upgrades or accessories when on maintenance agreement tune-ups or even demand service calls. Call backs may be an issue too.

Gross Margin & Operating Expense KPIs

- Installation Gross Margin is 45% or higher - 50% is perfect
- Service Gross Margin is 55% -65 % is perfect
- Overhead or Operating Expense should be 30% or less of revenue

Vicki LaPlant is a business adviser and coach for Service Roundtable. As a member of Rocky Mountain Gas Association, you are currently receiving a complimentary Affiliate membership to Service Roundtable. Visit www.serviceroundtable.com to learn more.

RMGA members can upgrade to a full-paying Service Roundtable member and have access to over 1,300 pieces of business and marketing content available in the download center. Full members also have 100 Preferred Partners that offer fantastic rebates for products you probably already use in your business.

Make the Most of Your Investment in Key Employees

MANY BUSINESS OWNERS

TRAIN and mentor employees for the long term, only to have them leave in two or three years. Have you experienced the loss of a promising employee? If so, then you know the costs related to turnover are high and

getting higher as jobs become more specialized. Even if you offer the usual employment benefits, and perhaps even a retirement plan, that may not be enough to retain these important employees in today's



competitive job market. Younger workers, in particular, don't want to wait until retirement for a bonus they often think in shorter terms. You also may have certain key employees who you want to let know how special they really are to your operation.

Questions to ask yourself about your key employees:

- Who keeps the business running smoothly when I am here? When I am not here? Do I want them to stay until their retirement? Or until my retirement?
- What is keeping them here? Job satisfaction? Financial security? A relationship with me or other employees? Will they stay because of their current benefits? If not, what will it take to keep them?
- Is there a way, without raising their salaries now, to give them an incentive to stay?
- Can I offer an additional benefit to these specific employees without offering it to all my employees?

How can I provide an incentive to stay to my most valuable employees?

An Employee Private Bonus Plan* will give your best employees a

reason to stay. It is a carefully thought-out promise to pay a selected key employee specified bonus amounts at specified times for continuing employment with your company.

A sample bonus schedule might include a \$5,000 bonus

after five years, \$7,500 after 10 years, and \$10,000 after 15 years. This bonus is generally tax-deductible to the business when paid. With this kind of plan, key employees don't have to wait until retirement to see their reward.

You can design the plan to get a maximum retention value. The agreement states that if your employee is not performing their duties satisfactorily or is no longer employed with you at the time of a scheduled bonus, no payment is made. This type of bonus plan is appreciated by all employees and is especially attractive to younger employees who are just starting their careers.

How do you get the money to pay bonuses?

You finance bonuses with a universal life insurance contract.

- When using life insurance as a funding vehicle, the business is the owner, payer, and beneficiary of the policy.
- Cash values are owned and controlled by the business, are shown as an asset on the books, and generally grow tax deferred.

- Insurance premiums are generally not taxdeductible to the business; however, the bonus is generally tax deductible when paid to the employee, once the employee has fulfilled the required number of years.
- Using cash value life insurance as a funding vehicle also provides the business with Key Person coverage in the event of the employee's death. The life insurance proceeds can be used to hire and train a replacement, and to replenish lost profits during the transition period.

A common variation includes offering a percentage of the death benefit to the employee's personal beneficiary through a written Endorsement Split-Dollar Agreement. This provides needed personal, taxfree death benefit coverage to your key employees for pennies on the dollar. For this tax-free death benefit, a small term insurance cost is reported on your employee's W-2 each year.

You may invest countless hours and dollars training and mentoring young employees. Your talented employees will be more likely to stay if you challenge them with responsibility and offer opportunities that may not be available from competing employers. An Employee Private Bonus Plan may help you get the best return for your investment in their future.

* All products and services may not be available in all states.

More articles from Federated Insurance can be found at: https://www.federatedinsurance.co m/ws/fi/InsuranceResources/index. htm



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