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Mission Statement: The mission of the ALOA Security Professionals Association, Inc., as dedicated members of the security industry, is to ensure professional excellence and ethics; create a public demand for professional locksmith services; represent and speak for the locksmith industry; and expand the exchange of trade information and knowledge with other security-related organizations to preserve and enhance the security industry.

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Focus for the Future

OR THOSE WHO ATTENDED THIS year's convention in Rosemont in the Chicago area, I hope you had a fabulous time at our industry's most stellar event. For those who didn't make it, you missed a great time as well as some of the best education in the industry. I urge you to start making plans to attend next year in National Harbor, MD, in the metro Washington, D.C., area. There is so much to partake of at the annual conventions that it should be on every security professional's "must attend" list. From education, networking and seeing old friends to learning about the latest and greatest products that can help you be a better security professional and boost your bottom line, there is something for everyone!

I'd like to take this opportunity to thank everyone who took the time to vote in this year's election and for bestowing on me the ability to lead our organization for the next two years. This is a membership association, and as a member you have the right and responsibility to vote the people into leadership positions whom you trust to lead the organization in the right direction. You should never take this responsibility lightly and should always exercise the right to vote.

As most of you know, ALOA SPAI has had some rough years of economic instability, and I am happy to say that due to a lot of hard work from the ALOA board and staff, we are on much better financial ground. We still have a long way to go, and there is yet much work to be done, but if we plan carefully and are fiscally

responsible, we will be able to grow our membership and give our members the benefits and recognition they deserve.

As we begin our new journey over the next two years, there are a couple of items that I would like to focus on. Scammer locksmiths have continued to be a problem and a plight for our industry. We have spent countless hours and resources combating them, yet they continue to thrive. We will of course continue to do everything in our power to fight them, but I'd like to see us change our focus and efforts to promoting ALOA and its members! If we can find ways to make it easier for the general public to find our members and provide them with the reasons they should use them over an advertised lowball price, the scammers will wither and die. I would also like to see our membership numbers grow here and abroad. There should be no reason

"There should be no reason for any legitimate locksmith, safe tech or other physical security professional not to be a member of ALOA SPAI!"



for any legitimate locksmith, safe tech or other physical security professional not to be a member of ALOA SPAI! There is strength in numbers, so if you know a security professional that isn't yet a member, please encourage him or her to join.

If we could make strides in these two basic but complex areas, we could change the entire landscape of the industry and pave the way for a more successful and profitable future for our members. So please help grow our membership and promote ALOA! If you have any ideas or suggestions that might help in these areas or have some other ideas or concerns you'd like to address, please don't hesitate to reach out to me or your regional director.

Best regards,

Jim Wiedman, CML
President
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What's New

H.L. Flake Acquires McDonald Dash

L. FLAKE SECURITY HARDWARE HAS ACQUIRED McDonald Dash Locksmith Supply, creating one of the largest independent security hardware distributors in the U.S.

"The union will benefit from McDonald Dash's strong market presence and reputation in the Southeast combined with H.L. Flake's extensive product offering and inventory availability, rock solid infrastructure and state of the art technology", according to the management team of H.L. Flake Security Hardware. The two companies will operate in the same manner as before. Dan Floeck will continue as CEO of H.L. Flake, while Jimmy Thomas will continue as General Manager of McDonald Dash. McDonald Dash will continue to be known as McDonald Dash and will receive orders via their existing phone, fax, email and website.

Advanced Diagnostics Releases the Smart Pro Key Programmer

the Smart Pro vehicle key, proximity and remote keyless entry programmer that provides fast and intuitive programming via the graphical user interface. Software is driven by Info Quest, the Advanced Diagnostics online key programming database with information for more than 5,000 vehicles, covering most makes and model worldwide.

Smart Pro allows for a purchase option, pay-as-you-go or an unlimited token plan. It comes with six months UTP, OBD master cable, mains cable and charger, USB operating manual, hard body carry case and a two-year warranty.



Advanced Diagnostics has a new key programmer that works with their Info Quest programming database.

NEWS BRIEFS

Car Keys Express, a discount mobile key replacement company, has recently expanded into Canada, Alaska, Hawaii and Europe. Service is now available in Canada in Vancouver, Calgary, Edmonton, Ottawa, Montreal, Toronto and Quebec. The company continues its international expansion with the opening of its first European office in London, England.

Top Notch Distributors (TND), one of the nation's largest architectural door hardware wholesalers, has updated its website at www.topnotchinc.com. New navigation is easier, and enhanced content includes a manufacturer resource page, listing of promotions, shipping maps by carrier, a new shopping section, live product inventory feeds and an e-store. It also features improved search function.

Master Lock Unveils New Products

ASTER LOCK HAS RELEASED SEVERAL NEW PRODucts, including a Bluetooth lock box and an electronic built-in locker lock. Through the free Master Lock Vault eLocks app, users can share temporary or permanent access to property and remotely monitor guest activity. Guests can use their smartphone as their key or use a secondary access code on the keypad. This is the first Bluetooth-enabled lock box available through locksmith distribution channels. Features include weather resistance, tamper alerts, low battery alerts via the app, two-year battery life and portable or mounted options. For more information, visit www.masterlock.com/bluetoothlockbox.



PRODUCT BRIEFS

Ilco has introduced two new transponders, the Texas 80 Bit Solution. Using the RW4 Plus or Ilco EZ-Clone Plus, users can clone for Toyota "G" models using the T80 Transponder and pre-code popular Toyota, Ford (T39 Transponder) Subaru, Kia and Hyundai models using the T39 transponder before programming with an Advanced Diagnostics MVP Pro or T-Code Pro.

The T80 and T39 transponders are compatible with Ilco GTH Modular Heads, Look-A-Like Key Shells and the Smart-4Car Flip Key Housing. A read/write Ilco modular head containing the T80 transponder is also available (GTHT80 DST80). Key blades are sold separately.

Keyport has introduced the MOCA (Measure Open Cut Anywhere) Multi-Tool, which incorporates 10 tools in a sleek profile. The stainless steel design includes a bottle opener, screwdriver, cord cutter, box opener, scoring tool, hex bit driver, ¼" wrench, 5/16" wrench, 3%" wrench and 2" ruler.

BEST Access Solutions, part of the dormakaba Group has released the Keystone Web key management program, the upgraded digital security program of Keystone 600N5 for current BEST customers. It's designed to simplify and coordinate storage of an organization's keys, keyholders and door and building access information, allowing for management of multiple keys, doors and users from a single intuitive user interface.

Keystone Web can track keys and store records of all cores, doors and buildings associated with each key. The program to be accessed from anywhere the user is connected to the network.



Yale Commercial, an ASSA ABLOY group company, has debuted its ANSI/BHMA Grade 1-certified 6100A Series emergency exit device that works with a complete range of Yale exit device trims. It features an aluminum rail design and a built-in battery-powered alarm that sounds 90dB at 10 feet. The device includes a secure rim latch that protects against unauthorized entry while providing quick egress. The metal cover on top of the rim latch protects the device from

vandalism, and a built-in safety monitor sounds when tampering. It comes with a 10-year warranty.

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Bradley Dobson

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CALENDAR

For a complete calendar of events. visit www.aloa.org.

SEPTEMBER

September 15-16

Doyle Security Products 2017 Tradeshow and Educational Weekend

Minneapolis Marriott Northwest 7025 Northland Drive North Minneapolis, MN 55428 www.doylesecurity.com (612) 521-6226

September 20-23

GPLA Convention

Doubletree By Hilton Philadelphia Airport

www.gpla.org

September 23

PRP Testing

Call (800) 532-2562, ext. 101 to register

www.aloa.org

OCTOBER

October 2-7

Six-Day Basic Locksmithing

ALOA Training Center Dallas, TX

education@aloa.org or (800) 532-2562, ext. 101

October 18-22

Yankee Security Conference & **Tradeshow**

Sturbridge, Massachusetts www.yankeesecurity.org Contact Seth Derderian at (800) 209-8266

October 19

PRP Testing

Call (800) 532-2562, ext. 101 to register

www.aloa.org

DECEMBER

December 4-9

Six-Day Basic Locksmithing

ALOA Training Center Dallas, TX

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IOWA

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Institutional Locksmith

Nicholasville

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Bourne

Eamonn Ledwidge

MICHIGAN

Belleville

Noel Jones

Bellville

Nicholas L. Jones

Mackinaw City

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Sponsor: Thomas R. Demont, AHC,

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MINNESOTA

Brooklyn Center

Kevin J. Tesmar

Apprentice Member

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MISSOURI

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Josh Armbruster

Juan Christlieb

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William E. Davis III

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NEBRASKA

Lincoln

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ON

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These applicants are scheduled for clearance as members of ALOA. The names are published for member review and for comment within 30 days of this Keynotes issue date, respectively, to ensure applicants meet the standards of ALOA's Code of Ethics. Protests, if any, must be addressed to the ALOA membership department, signed and submitted via e-mail to membership@ aloa.org or via fax to 214-819-9736.

We Need Your Help

Attention, ALOA members: Help us eliminate the ongoing industry problem of scammers by screening the new applicants listed on these pages. If you have questions or concerns about any of the (214) 819-9733, ext. 219, or email kevin@aloa.org.

applicants, please contact Kevin Wesley, membership manager, at



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Visit adamsrite.com/TriedAndTrueSolutions to learn more.







Hiring and Retaining Quality Employees

Katelyn Radtke explains how taking your time and conducting this process the right way can save you future headaches.

NE OF THE MOST CHALLENGING ASPECTS OF OWNING A BUSINESS IS EMployee management. This challenge begins at hiring and, unfortunately, it never ends — it only changes shape. In the locksmith industry, the learning curve for a new hire can last months or even years, depending on the level of experience that is brought to the table initially. Once employees are well oriented and set up for success, the struggle is to keep them satisfied in their seats at your company's table.

Take Your Time

Although your specific situation and the urgency to hire may not allow you to be as selective as you would like, it's critical to be sure of your hiring decision. A recent CAP study showed that the average cost to replace a \$10-per-hour retail employee would

be \$3,328 — a whopping 16-20% of the annual salary for low- to-mid range positions. Obviously, the higher the base pay, the larger the expense. Factor in insurance rates, uniforms, training and other onboarding expenses, and the price tag can quickly escalate.

Articulate Your Needs

It's important to make your expectations incredibly clear, beginning in your job posting and initial conversations with potential hires. A complete hiring ad includes at a minimum the following: company name, link to company's website, title of position, work hours, job duties, expected qualifications, required experience, list of available benefits, opportunities for promotion, company contact person for questions and available compensation range. Depending on the position and competitive hiring market in your area, you may choose to withhold a range of compensation and instead include a clause that states pay "depends on experience." Another tactful option is to include a range of available pay rather than no details at all. This may be helpful

in attracting the right caliber of candidates to your company. It's far from fun to filter through a flurry of over- and under-qualified applicants. Stating a range of pay can help you hone in on the exact quality you are after.

Advertise the Vacancy

Consider what type of advertising you would like to do and how that medium is consistent with the prospective employees you want to attract. The most popular place to search for a job is definitely online. If you aren't advertising your positions online yet, look into your options on local job boards, Craigslist, and industry-specific chat groups. ALOA has an online jobs center too at careers.aloa.org.

When it comes to covering your bases, never underestimate the power of a sign in the door of your storefront or in the window of your service vehicles. One of the biggest hiring pools includes people in your local vicinity, and visibility is a great way to reach these candidates. Another way to promote any vacancies within your company is to network with other business owners and community members and tell them in person what your company's needs are. A great place to start is with your local chamber of commerce. Many host networking meetings or mixers at night that provide a great opportunity to bring your business cards and company literature. The benefit is that you might not just find a new candidate to interview; you may also discover new clients and resources to help your company grow! Don't be afraid to reach out to your fellow business owner friends and colleagues to spread the word that you're hiring. Every person has his or her own contact sphere, and the more word spreads, the larger the net that's cast to find the best candidate. It's a common saying to "never hire friends or work with family," but if you feel capable

"Consider
what type of
advertising
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consistent with
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want to attract."

of delegating work to the individual and able to provide structure and discipline, hiring within your immediate community may work well for you. This is, of course, something to carefully consider and is a unique choice for each business owner.

Give Credit Where Credit Is Due

Your first impression of a candidate begins when reading a resume or application. The interview begins when you first contact the candidates. Are their resumes current? Are there frequent spelling and grammatical errors? Do they answer their phone or return the call in a timely manner? Are they professional and eloquent? Are they able to accurately and easily take down the location, date and time of your meeting? No one's perfect, and it's common and expected for someone to be nervous or a little awkward during first interactions, but there's also ample opportunity to be impressed during these phases of hiring! Keep an eye out for a candidate who shines early on. Be sure your applicant shows up early and follows through on any commitments that are made. Of course, you're also up for a first impression, so do your best to be prompt and energetic yourself. This will help you maintain a respected rapport if you end up managing this person as an employee in the near future.

Conduct a Quality Interview

First impressions are valuable, and it's crucial keep an eye out for any red flags. Tardiness, flakiness or a disheveled appearance are some of the top interview fails that plague otherwise promising candidates. And remember: An interview is only as good as the conductor makes it! Preparation is key (cue the eye roll!). It's imperative to bring a list of questions to an interview to ensure that there are no oversights. Prior to the meeting, it may work well to make a list of things you'd like to know about the candidate. While it can be difficult to come up with quality questions, the list of what you'd like to learn can help shape a great interview. This can be the same for each interviewee or can be specific to a certain applicant. Your list may include special skills or certifications you're interested in learning more about, a question about a gap in employment, or your interest in their familiarity with special equipment. It's always important to review the ad the applicant responded to in greater detail and to ask if the interviewee has any questions for you.

Maintain Your Own Enthusiasm

The process of hiring and training can be grueling for business owners and managers. The initial need for new staff is most often due to someone moving on, and that's not always a smooth transition. The exhaustion of management can begin long before the vacancy exists! To have the best outcome possible, it's critical to try to feed your managers positive acknowledgment and encouragement as often as you can. Employees moving on

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WWW.ALOA.ORG SEPTEMBER 2017 **KEYNOTES**



Consider what type of advertising you would like to do and how that medium is consistent with the prospective employees you want to attract.

due to termination or of their own accord can often feel like a failure to their managers. Before bringing in someone new, managers may need a nudge to find the energy to start all over again. As an owner, you may feel troubled that no one will be as good as your last hire or that no one could possibly be worse, but it's important to be careful with how that influences your decisions moving forward. If you need to bring other members of your team in on the process with you — or if you need to sit in on your manager's normal interviewing responsibilities — don't hesitate to do so!

Maintain Momentum

Once you've brought a new team member on board, the work is just beginning and it remains true that the initial hiring period is the most demanding. Mark your calendar with reminders of important dates, milestones and 30/60/90 day reviews. Try your best to acknowledge the employee's growth on a regular, but authentic, basis. Make employees' paths extremely clear to them. If you have expectations of skills, independence or sales benchmarks, follow up on them regularly and be as communicative as possible. Remember that some people are more visual learners and may benefit from having reports or copies of expectations in writing.

Be sure new hires know their chain of

command and who to report to in the event of serious questions or any needs. Discussing simple things — such as knowing how to call in sick — can avoid conflict and sets your new hire up for success. A well-put-together company handbook is the best antidote to confusion and dysfunction, but note that the absence of a handbook, or even a sub-par one, can create a lot of headaches. If you are in need of human resources support, consider reaching out to a local benefits company or to your own provider with your needs. Most states have an online resource for support, such as HR California. Entities such as the National Federation of Independent Business (NFIB) and your local chamber of commerce might also have newsletters that will help you stay up to date on mandated forms and documents. If you have any legal needs or need to verify that your policies are appropriate, you may consider contacting a business attorney for support. Remember that, during training, your other employees are exercising more patience than usual. Acknowledge their efforts as appropriate, and your company wins. Good energy among a unified team goes a long way and ultimately is experienced by your customers too. Unfortunately, the opposite is just as true. Remember that conflict is bound to occur, and how you handle it shapes the outcome.

Eyes on the Prize

When recruiting applicants, it's important to be patient and thorough. It's been said time and time again that the more attention to detail spent during the hiring phase, the less stress and gray hair you'll have later! Spend your energy wisely, and focus on your desired outcome during the more challenging moments. Remember, if you don't have any train wreck resume or interview stories, you really haven't lived.* In the end, the results will make the wild ride well worth it!

*Not statistically proven. Once an applicant wrote on an application that he had extensive safe-cracking history. When asked what tools and methods he was familiar with, he responded "just a crowbar." He was serious.

Source of CAP study: http://bit. ly/2egT28Z �



Katelyn Lucas Radtke is a fourth-generation security professional based in the San Francisco Bay area. She is an expert contributor to Blackhawk

Living Magazine and lead contributor to Give-A-Hoot.com, a website, blog and You-Tube channel empowering communities by providing safety and security information, tips and education.



At the IAIL meeting at the 2017 ALOA Convention, the division board discussed future educational opportunities.

New Investigative Courses On Deck

IAIL President Tom Demont gives updates on investigative education opportunities.

drudge of work. I hope that everyone got their batteries charged over the past few months and is enjoying the changing of the seasons. Living in Pittsburgh gives me the full quarterly seasonal changes, and I love each of them. The ALOA Convention this past July was one of the best I've attended in some time, with attendance steady each show day and our classes well stocked with eager students.

We did have an IAIL member meeting on July 20th at 5:30 pm with 41 members in attendance. The current board present was Tom Demont, CFL – President; Tom Ware, CFL - VP, Ross Squire, CFL- BOD; Bill Petley, CFL – BOD; and Brian Van-Denburgh, CFL – BOD, our new board of director who is replacing Glenn Henning, CFL. There was an excused absence for Rick Shuford, CFL - BOD and Scott Paulhus - BOD. Discussions were held about the classes offered at this conference and requests

Get Published!

IAIL members: Submit your articles for the Investigative Spotlight department. Send your information to Ross Squire at ross@abcforensic.com.

were made that we try to have all of the core classes available at the convention or at the Aaron M. Fish Security Training Center in Dallas. A request was made that we have a mini conference for forensic locksmiths in Dallas next year where the members could take all of the core classes and, if ready, take the CFL exam at the end of that training.

The idea was presented to our education manager Jim Hancock to get an idea what the cost would be to put on a threeday event in Dallas. Keep in mind that we have the training facility, but we would need to supply the instructors. Budget time is fast approaching, and I would like to get some feedback from our members to see if they'd like to participate in this event — and if we decided to hold it, what month would you like to see the training held. Keep in mind that you must be a member of IAIL for one full year before you can sit for the Certified Forensic Locksmith (CFL) exam.

To give you an idea what we are looking at for the three-day event, classes would be condensed to 4-5 hours each, and we would run two classes per day starting at 8:00 a.m. and finishing at 5-6:00 p.m. We would run multiple classes simultaneously so students could attend as many classes as possible in the three-day event. Your feedback is needed.

The CFL committee is working on new courses to offer next year to help round out your forensic training. One of the new courses being developed is expert witness training. This course should be taken by all locksmiths to help them with testifying as an expert witness. If there are specific courses you'd like to see offered through IAIL, please add that to your e-mail to me along with the other information I requested. As always, if you have any comments or suggestions, please contact me at iailpresident@aloa. org. Don't miss an opportunity to add another profit center to your portfolio. ®



Tom Resciniti Demont, AHC, CAI, CFDI, CFL, CMIL, CML, CMST, ICML, IFDI, LSFDI, ARL, President, International Association of Investigative Locksmiths.

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IAILPresident@aloa.org

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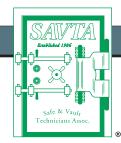




Figure 1. The wheel posts are still attached to the wheels.

Wheel of Misfortune

Bill Curtis explains how he discovered and repaired faulty wheel posts on three S&G 6700s.

DON'T KNOW HOW MANY OF YOU HAVE EVER STRUGGLED TO OVERCOME A BROken wheel-pack post, but they can really try your patience. Here's my story.

On December 15, 2013, our local Safeway store manager called me. Their safe wouldn't open, and of course, all of the change and cash register drawers were in there and needed for the next shift. Having worked on the inner compartment lock before, I knew I was in for a battle because this is a TL-30 Allied Gary Burglary safe.

When I started diagnosing the possible problem, I first thought it was a screw that had backed out of the lock box and had somehow fallen against the wheel pack, causing it to sometimes seem to work smoothly and then all of a sudden lock up. I had spent over an hour trying to manipulate the lock to no avail.

I decided to drill directly for the fence to look it over. This thing has a tough, hard plate. However, using my StrongArm rig and two or three StrongArm bits, I drilled it — of course, dead on the drop in.

When I began bringing the wheels into place, everything was normal on the first wheel. When I tried to bring the second wheel into the drop zone, it would pick up the third wheel. After a couple of tries, I could see the problem: a broken wheel post.

To make a long story short, it took me hours to overcome this, working through a ¼-inch hole and not wanting to enlarge the hole for fear of breaking off a bit and/ or over-drilling and possibly hitting the front wheel. After a considerable amount of time in a not-so-comfortable position, I got it open by what you might call caressing each wheel into the drop area, ever so carefully.

A Defective Batch?

I mentioned to the woman in charge that this would be a good time to service the lock on the top compartment and explained the monetary benefit of having to do so instead of facing another lock-out. She agreed. Lo and behold, believe it or not, when I removed the back cover to service the top compartment lock, the wheel post was broken.

Unbelievable! Fortunately, it was still working as a normal lock for two possible reasons, I think. Either it had just recently broken or there was a small piece still helping to hold it in place. I of course replaced both locks, wondering if I should have used two different brands, and if maybe when this safe was made there was a defective batch of locks from the factory.

A Wheely Big Problem

Not long after that, a locksmith in Portland, OR, called and said he was at a Thriftway grocery store and had been trying to open a safe for longer than 45



Figure 2. The wheels lifted right out when the back cover was taken off.

minutes and needed me to drill it, now. The reason for the emergency? All of their change was in it (in the top compartment). I live 55 miles from where the store is at in Portland. I told him I would be there as soon as possible, with tools in hand.

When he told me the symptoms of the lockout, I told him that I was sure the wheel post was broken. Sure enough, when I drilled it, it had a broken wheel post. I told him I couldn't believe it because of the two earlier ones that I had to open in December with the same problem. I drilled a ¼-inch hole but finally had to enlarge it to a 5/16-inch hole, which helped. Overall this lockout

took me five and a half hours, almost non-stop, to open.

If you get a call and the person says they can't get their lock open, and it sometimes feels bumpy and sometimes feels smooth, ask them to please not try to work the lock until you can get there. Here's what I suggest: When you begin testing the lock, be patient and turn the wheels slowly to try to manipulate them. Also, as you're slowly turning the wheels, softly tap on the face of the dial as you are turning it.

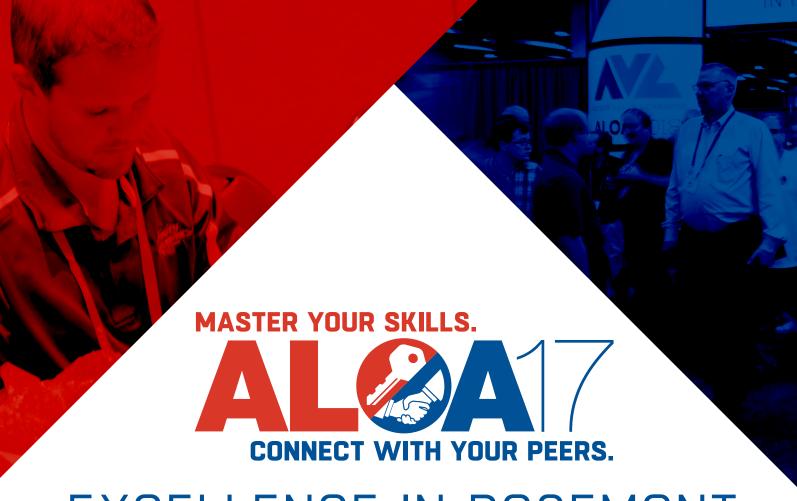
Try pulling out on the dial as you slowly turn it. Why? With the post broken at the base and moving around quite a bit as you turn the dial, the wheels literally lean against each other from time to time. It can be pretty frustrating, even when you're looking at them through your drilled hole and trying to line them up under the fence with your poke tool, or whatever you use.

I called S&G and told them about the three broken posts in one month, and the woman that I spoke to said she has worked for S&G for three years and had never heard of a broken wheel post. @



Bill Curtis, Sublimity, OR, owned and operated a locksmith shop in Salem for 32 years. You can reach him at bncurtis@wvi.com.

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EXCELLENCE IN ROSEMONT

Attendees mastered their skills via classes and networked with their peers at ALOA 2017 in Rosemont.

was a great success for your association, and everyone enjoyed the return to Rosemont, IL. Security professionals participated in the industry's most respected locksmithing classes — both new ones and old favorites — and valuable networking events. The show floor provided so many introductions to new products. Attendees from all over the world were drawn to the industry's premier event, which took place July 16-22 at the Donald E. Stephens Convention Center. A total of 24 nations were represented at our internationally recognized event. Illinois was by far the most-represented state.

A big thank you to all of our attendees, vendors, instructors, volunteers and organizers who helped make this week of connection, education and entertainment so impactful. If you couldn't make it, you can still go online to check out the latest products from our exhibitors (take a look at page 29 to see who was there)

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and to think about what ALOA Education classes you'd like to take over the next few months.

At the convention, we had on hand introductory information about ALOA's new FindALocksmith.com site, which is in final development stages. Please watch out for emails pertaining your listing and exciting new opportunities for you to promote your business on the site for additional exposure and business development.

Make plans now to attend ALOA 2018 in National Harbor, MD in the Washington, D.C., area. Mark July 8-14, 2018 on your calendars, and get ready to have access to the best learning and the industry's best week all year — all at an unsurpassed value.

For now, enjoy the highlights of ALOA 2017. See you next year!

Mary A. May

Executive Director





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MEMBERSHIP MEETING

The 2017 Annual Membership Meeting, which took place Friday, July 21, featured updates by board members; a report from Executive Director Mary A. May; numerous awards presentations; a report on the ALOA Scholarship Foundation; and comments and questions from members. For complete minutes from the meeting, please see p.28.



The Pride of the Past, the Power of the Future



Introducing The New M680E **EcoMag**

The M680E Magnalock. Smart, versatile, eco-friendly... and The Future.

Offering up to 80% reduction in energy consumption with average current draws as low as 60mA, the new M680E magnalock with EcoMag technology is the most advanced magnalock on the market. Camera and Request to Exit options, increased 1,200 lbs holding force, and built-in door prop sensing adds a level of security and safety second to none.



Learn more about the most advanced (and eco-friendly) magnalock available at www.securitron.com.



WOMEN IN LOCKSMITHING

Big Red, H. L. Flake, Ilco, Professional Business Products and TimeMaster sponsored the sixth annual Women in Locksmithing (WIL) meeting, which drew the biggest crowd to date. Nearly 50 female security professionals came together for food, drinks and networking. Many newcomers attended, and the sponsors graciously provided each guest with a WIL-branded thermos and a bracelet with a key pendant.





Sponsored by Medeco, the international reception hosted convention attendees from around the world for networking and camaraderie.

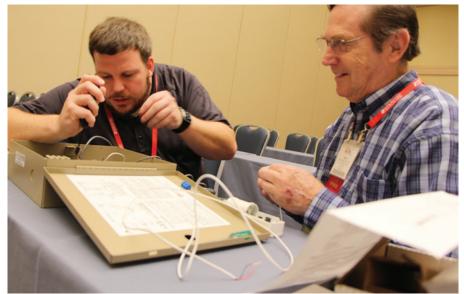














CLASSES

ALOA 2017 featured many new classes and old favorites, such as Intermediate Foreign Auto, Introduction to Access Control, Advanced Manipulation, High Security Cylinder and Fundamentals of Locksmithing.



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A big congratulations to Dan Billheimer, CPL, CPS, who won the grand prize drawing of a free registration package to ALOA 2018 in National Harbor, MD.



Congrats to Stephen Miller, CPL, CPS, of Certified Lock & Access in Wilmington, DE, who won ASF's grand prize raffle drawing of an AMSEC safe.







SECURITY EXPOEXCITEMENT

More than 2,000 industry professionals came together for the 2017 Security Expo. which featured more than 125 exhibitors. Congratulations to all of our prize winners! A big congratulations to Dan Billheimer, CPL, CPS, of Henry's Key & Lock Shop in Mansfield, OH, who won a full registration package for ALOA 2018 in National Harbor, MD. Stephen Miller, CPL, CPS, of Certified Lock & Access in Wilmington, DE, won ALOA Scholarship Foundation's (ASF) raffle for an AMSEC safe. Thank you to AMSEC for their generous support of ALOA scholarships as well as to all of the individual and corporate donors who make these scholarships possible. You're supporting the future of the industry!









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KICK-OFF PARTY

Hundreds attended this special night of celebrating the start of the Security Expo. Music, food and fun filled the evening, and HelloTech graciously sponsored this event to help make it possible.

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ALOA 2017 AWARD WINNERS

Here's a quick look at this year's winners.



ALOA Award
William M. Lynk, CML, CPS, ICML, CMIL,
CAI, M.Ed.

The ALOA Award, which is presented to a living person who has shown a lifetime of outstanding achievement in and support for the locksmith industry through his or her contributions in education, association service and public relations. The ALOA Award recipient is chosen by its three most recent recipients. This year's award went to William M. Lynk, CML, CPS, ICML, CMIL, CAI, M.Ed.



Ray D'Adamo ACE Instructor Award Mannie Natal, CRL, CAL

This award is presented to instructors who — through their contribution of time, effort and knowledge, and pursuit of educational excellence — go beyond their peers to promote and provide outstanding service. This year's award went to Mannie Natal, CRL, CAL.



Author of the Year Award Wayne Winton

Chosen by the editorial board, the award is presented annually to a contributing writer who excels in writing informative articles for the *Keynotes* readership. This year's award goes to Wayne Winton.



President's Award
Denise Parks

The President's Award is chosen by the ALOA president to recognize an individual who makes outstanding contributions to the association.

Mark Dawson accepted the award on behalf of Denise Parks, who was unable to attend.



Best New Product Award
Capitol Industries' Magnetic Padlock

This padlock is built to work past freezing, salt, dirt and anything you can throw at it. The sealed mechanism is impervious to the elements.

NEW PRODUCT SHOWCASE

Thank you to all of our exhibitors who participated in the new product showcase. And congratulations to Capitol Industries, who won Best New Product for their magnetic padlock!

Allegion/Schlage

Schlage LE Series Wireless Lock:

Schlage LE wireless locks are integrated into popular electronic access control systems from Software Alliance members to bring the benefits of EAC deeper into the building. The LE design packages the mortise lock, credential reader, and access con-



trol sensors together in to a small footprint that is both elegant and affordable. They feature two sleek trim options with broad range of decorative lever choices. The LE mortise chassis can be ordered with an interior push button or deadbolt for specific applications. Capability includes the use of both proximity (125 kHz) and/or Smart (13.56 MHz) credentials which feature a much higher level of security and versatility.

Schlage Control Smart Locks:

Schlage Control smart locks mark a new era of electronic access control in the multi-family market by ushering in the next generation of highly scalable and efficiency-boosting capabilities. Properties can now



focus on operating more profitably and with greater appeal. Without traditional keys to deal with, properties will save time and money in managing resident doors. Available as a deadbolt or interconnect design, Schlage Control smart locks introduce an array of additional, and intelligent, advantages.

Blue Access Technologies

cobalt - Online: Locksmiths can generate recurring revenue via the COBALT - Online access control solution. The onsite work is fast and easy when using the Bluetooth-based line of hardware.



Capitol Industries

Magnetic Padlock: Built to work past freezing, salt, dirt and anything you can throw at it. Sealed mechanism is impervious to the elements.



MMF Industries

Steelmaster Uni-Tag Vue Key Cabinet: Most thorough system to organize multiple keys. Reinforced high-impact metal protects against breakage.



Steelmaster Flex Key Cabinet:

Provides maximum flexibility for arranging, storing and protecting keys. Made of durable heavy gauge steel.



PDQ Manufacturing PDQ SMART - Cloud

Based Access Control
Solutions: Use your
smartphone to lock
and unlock your door.
Easy to install. Easy to
manage. Easy to use.
If you can take a pic-



ture with your phone, install a lock, operate an app or online banking, this system is for you.

Professional Business Products Laser Cut Key Tag



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BY THE MINUTE

ALOA Secretary Clyde Roberson provides the minutes from the 2017 Annual Membership Meeting of ALOA Security Professionals Association, Inc.

Friday, July 21, 2017

Official Draft, Pending Membership Approval

- The 2017 annual membership meeting was held in the Donald E. Stephens Convention Center, room #49, in Rosemont, IL on July 21, 2017. The meeting was called to order at 8:15 a.m. by President Tom Foxwell and was followed by the Pledge of Allegiance, led by Secretary Clyde Roberson. A quorum was not required as per the Association's new rules.
- 2. The following board members were present: President Tom Foxwell, Secretary Clyde Roberson, Southeast Director Bill Boughman, SAVTA Division President Joe Cortie, Non-Voting Director Bob Cullum, South Central Director Mark Dawson, Trustee and IAIL President Tom Demont, Southwest Director Charles Eastwood, Associate Director Noel Flynn, Northeast Director Bill Mandlebaum, Trustee Hans Mejlshede, North Central Director John Soderland, International Director Yoshio Suzuki, AIL Division President John Truempy, Director, ALOA Latino Division Humberto Villegas, Non-Voting Director and President-Elect Jim Wiedman.
- 3. President Foxwell introduced members of the ALOA Board, ALOA staff, and special guests, including Past Presidents of ALOA Bob Mock, John Greenan, Tom Demont, Hans Mejlshede, Ken Kupferman and Evelyn Wersonick. Also welcomed was Dave O'Toole, president of the European Locksmith Federation, and Taka Kuwana from Japan.
- President Foxwell also gave a special thank you to the ALOA staff for all they had done throughout the year and the hard work for the convention.
- 5. M/M Jack Walder #54150/Guy Spinello #3306 to accept and approve the minutes of the previous meetings:
 - June 2015 Annual Election Meeting
 - June 2016 Annual Election Meeting
 - 2015 Annual Membership Meeting minutes
 - 2016 Annual Membership Meeting minutes

Motions adopted.

- 6. President Foxwell reported to the membership his activities for the last twelve months and during his two-year term. In particular, he highlighted the ALOA fiscal improvements, his travel to Tokyo to meet with the ALOA Asian Chapter, the growth of the Women in Locksmithing Group, this year's positive convention outlook and the success of the recent Security Leaders Business Conference. ALOA-SPAI is regarded internationally as the leading association for locksmiths worldwide.
- 7. Executive Director Mary May gave her report to the membership and welcomed everyone to the 61st annual convention. She announced the

site of next year's 2018 convention at National Harbor, a Gaylord property in the Washington D.C. area, and the 2019 site as in Las Vegas.

- 8. Awards
 - a. Report and presentation of the ALOA Scholarship Foundation was given by Bob Mock.
 - b. Report from the ALOA Education Department by Jim Hancock, highlighting the automotive track by Mannie Natal and Ed Woods, the electronics track by Greg Perry and a thank you to Casey Camper for his longstanding help with the Fundamentals of Locksmithing course.
 - c. The Ray D'Adamo ACE Instructor Award was presented by Jim Hancock to Mannie Natal.
 - d. The ALOA Lifetime Achievement Award presented by Bill Mandlebaum to William Lynk.
 - e. The Keynotes Author of the Year Award presented by Wendy Angel to Wayne Winton.
 - f. The President's Award presented by Tom Foxwell to Denise Parks, accepted on her behalf by Mark Dawson.
- 9. President Foxwell announced the election results:
 - Jim Wiedman, President
 - Guy Spinello, North Central Director
 - Charles Eastwood, Southwest Director
 - Noel Flynn, Associate Director
 - Bill Boughman, Southeast Director

Office of President: 359/100% voted for Jim Wiedman for President, 45 abstained.

Office of NC Region Director: Guy Spinello won with 35 votes over Tom Ripp with 32 votes.

Office of SW Region Director: Charles Eastwood won with 44 votes, 10 abstentions.

Office of SE Region Director: Bill Boughman won with 58 votes, 15 abstentions.

Office of Associate Region Director: Noel Flynn won with 6 votes, 1 abstention.

- 10.MM Barry Wilensky #15140/Mark Stevens #60833
 - a. Motion to destroy ballots for the 2015 election
 - b. Motion to destroy ballots for the 2016 election
 - c. Motions adopted
- 11. The newly elected board members were sworn into office.
- 12.Departing board members Hans Mejlshede, John Soderland, Tom Foxwell (now Trustee) were recognized.
- 13. There was the Call for the Good of the Order, after which the meeting was adjourned at 9:03 a.m.

SEEN IN ROSEMONT

A giant thank you to the many companies who exhibited at the 2017 ALOA Convention & Security Expo. We'll see you next year!

A-1 / Lockcraft ABUS USA Access Tools Acculock ACS SRL Adrian Steel

Advanced Diagnostics USA/Ilco

Alarm Lock Systems, Inc.

Allegion/Schlage

ALOA Security Professionals

Association AMSEC

Arcotech Ltd

ALOA Scholarship Foundation

ASSA ABLOY
Bad Dog Tools
Big Red Safe Locks
Blackhawk Products
Blue Access Technologies

Borg Locks Bullseye SD Locks

BXB Media
Capitol Industries

CarandTruckRemotes.com CCL Security Products Clark Security Products

CLK Supplies Codelocks, Inc

Command Access Technologies Compx Security Products

Dakota Alert
Detex Corporation
DORMAKABA BEST
Doyle Security Products
Dugmore & Duncan
Easykeys.com
Entrematic

Fair Trade Locksmith
FieldEdge, Formerly dESCo
FJM Security Products

Framon Mfg./HATA, Inc./Laser Key

Products Gardall Safe Corp. General Lock Geozy Solutions LLC Global Network Security Guru Lock Network

HelloTech HL Flake Hollon Safe

Hornady Security Products, Inc Host Chapters: Wisconsin ALOA Chapters Fox Valley and West Central; and L.A.W Locksmith

Alliance of Wisconsin

HouseCall Pro

HPC, a Hudson Lock Co.

IDN Inc IDS, Inc.

Inkas Safe Manufacturing Intelligent Key Solutions International Key Supply

Intralock Tools i-TEC (APA) IAOX

Jet Hardware Mfg

JMA USA Just Door Toolz Kaba Ilco KEY DIY USA

Key Technologies By MG

Key-Bak KEYKING APIARY Keyless Ride Keyline USA KeyNet.com Klassy Keys

KSP-Killeen Security Products

KYDZ LAB

Lockmasters Inc

LockPicks.com by Brockhage

Locksmith Ledger
Locksmith Resource
LTS Chicago Enterprises
Lucky Line Products
Luckylocks AD
MARKS USA

Master Lock Company Mercedes-Benz Vans USA

Midwest Keyless Millner-Haufen Tool Co. MIWA Lock Co., LTD MMF Industries

NASTF

National Auto Lock Service

Olympus Lock Original Safes USA

Oyster

PDQ Manufacturing

Philadelphia Hardware Group

Premier Lock

Professional Business Products, Inc

(PBP) Promet Safe

Remote King PTY LTD ROFU Security International

Corporation
Sargent & Greenleaf
ScopePlus Labs, Inc.
SecuRam Systems, Inc
Secure 24 - ADT
Secure-T Agency (STA)
Securitech Group, Inc.

Secure-T Agency (STA)
Securitech Group, Inc.
Security Door Controls
Security Lock Distributors
Signature Card Processing
Smart Box Technology
Southern Lock & Supply Co.
STRATTEC Security Corp.
Sun Safes Mfg. Co.

Taylor Technologies
The Diagnostics Box
The National Locksmith
TimeMaster, Inc.

Transponder Island, Inc. Turn 10 Wholesale UHS Hardware

US Lock

Westlake Web Works Wilson Bohannan Lock Co.

Xhorse USA Inc ⊚

AL SA STOPPERS

Greg Perry, CML, CPS, provides some product highlights from this year's Security Expo in Rosemont.

was one of the best educational events and conventions in many years. All day Friday and Saturday, the booths were filled with attendees looking at new products and asking questions about current products. I struggled to make it through all the booths and had to go back to several of them just because they were so busy.

It's always difficult to decide which products to showcase. Manufacturers are always striving to produce a better product with new features inside the locks, or adding more keys or remotes to their line as some automotive lock and remote manufacturers have. This year, most manufactures want to showcase advancements in electronics for commercial, residential and automotive products. The mechanical lock will not go away soon — if ever — but electronics are the way of the future; just look at push to start in vehicles. Last year, I called it the year of Bluetooth. This year, the trend continues with more and more products connecting to your phone or tablet using apps or Bluetooth.

Master Lock

Master Lock introduced Bluetooth padlocks last year. This year, they added to the line with Bluetooth-enabled lock boxes. The market for this product can go in several different directions. The first is the parent who doesn't trust his kid to have a key to lose — but most kids don't lose their phones. Next is the rental market, allowing owners to grant access to almost anywhere in the world from anywhere that has an internet connection. Another market currently dominated by a mechanical lock box is the real estate market. The Master Lock Bluetooth boxes can limit access to certain times, and and you can pull the access log through the app.

Master Lock has also introduced an electronic locker lock. Designed for wood doors, this can be a lucrative product to install at high-end health spas or corporate changing rooms.





BEKEY

IDN introduced me to this one. BEKEY is an access control system that only needs a power source and a strike or electrified lock. It may look simple — and it is — but this powerful module connects through an app on your phone with Bluetooth technology to provide access control. At \$120 dealer cost for the module and a free app, it's impossible to not like this product to provide electronic access for homes and smaller businesses.



CopyMyTag

CopyMyTag from Australia offers a tool that will copy RFID cards and tags that are not "iClass." This technology is great for people who want to add an additional card or who prefer a tag instead of a card. The technology comes with a risk that's similar to providing a copy of a common or non-patent controlled key stamped "do not duplicate." It's only the integrity of the person with the tool that will prevent them from copying a card for a system that they shouldn't. Some may be upset with the idea of this or that the tool exists, but if they can do it, so can the very "bad" actors. The technology has been around for many years; it's just now that companies such as CopyMyTag are making them commercially available.





Another product from CopyMyTag that's very similar to the RFID cloning tool is the remote cloner. It will clone about 90% of the automotive remotes on the market today. A nice benefit of being able to clone the remote is that you can separate the prox from the remote on automotive keys and you can also program them to different-style remotes.

Midwest Keyless

Midwest Keyless offers a similar remote programming tool and a variety of remotes and remote head keys ready to clone.





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XTool

Automotive locksmithing has become a sub-specialty of lock-smithing, and some will argue it's its own specialty all by itself. Many tools such as this programmer from many different suppliers will flash the chips, allowing the vehicle to accept new keys, or the tool can add or accept new keys in to the system.



XTool and TrueCode

Many of the basic programming tools can now be connected to your smart phone, and with an app they will program keys for a wide variety of vehicles. These two are available from different sources.





CarandTruckRemotes.com

Car and Truck Remotes has several different programmers and a press for removing the pin that holds the key blade in the remote on switch-blade-type keys. No more trying to find the right punch and then beating on the key.



Schlage

Schlage, a division of Allegion, has added to their electronic lock lineup a new LE line of electrified mortise locks to complement their AD cylindrical line. It's available in both the full escutcheon shown here and sectional trim.



Von Duprin

Moving to another Allegion brand, Von Duprin has a relatively new motorized latch retraction module to replace the in-rush power-hungry solenoid. The new module is simple to install and only draws 1 amp of current, meaning almost anyone's power supply will

operate it. The distance between the lock and power supply is greatly increased.



Several years

ago at the ALOA Convention and Security Expo in Las Vegas, Von Duprin introduced their vertical cable system exit device. This was a huge improvement from the concealed vertical rod exit device. Double doors have always been a challenge. Installing them on the surface with a bottom rod especially means the rods will be bent by carts. Remove the bottom rod and the door is only latched on top — not the most secure. Concealing the rods in the door seemed like a good idea, but adjustments can be difficult, especially if you need to drop a heavy door to get to them. The vertical cable system solves many of these problems, especially the need to drop a door to adjust the rods. The original design required carefully measuring the door to order the correct length cables.

This year, they redesigned it to be field-sizeable. The cable has a locking system between two different-size cable tubes that allow the installer to size the tubes to the correct length using the door at one end and a template at the other for a gauge. Double and triple check your measurements before cutting the cable at the correct length before install.



Securitech

Securitech focuses on creating high-quality locks, both mechanical and electrified. One difficult area is aluminum glass storefront-type doors. I say difficult because the options for locking systems are limited. Latches are not high security, maglocks are not allowed by many jurisdictions and center-hung



double-action doors can be even more challenging. Securitech has a solution with this trim that, when energized, allows the lever to operate in either direction to lock or unlock the deadbolt. This is great for stores or businesses that want access control on the front door to limit keys, but once it's unlocked, it can stay unlocked.



I have used a variety of methods for jumping the power between the frame and the door, but aluminum glass doors is challenging. Door cords can be easily damaged by people hanging or pulling on them, and if the door is center-hung, routing the wire from the hinge edge around the pivot is never simple. Securitech has the answer: The plate half on the right is mounted to or in the header, and the other part is then dropped into the top of the latch side door channel to the lock. When the door is closed, it makes the electrical connection. Once the door is open, it loses connection, but this doesn't matter because the door is already open.

Rofu

Door cords still have their place, including this one from Rofu. It's a little bit of a twist with an 8 conductor 24-gauge cable preinstalled.





Rofu has a variety of electric strikes, including these two that require no cutting of the frame.

Command Access

Command Access has designed or invented many of the electrified technologies in use today. They were one of the first to use motorized latch retraction instead of solenoids. They recently redesigned the Von Duprin retrofit kit and added a REX, or request to exit switch. This is great because most electronic access control requires a REX and a door position sensor or contact.



Command Access also redesigned their mortise lock to operate with a motor. For applications that simply use the control to activate the door with each read of a card, it probably doesn't mean much to use a motor instead of a solenoid. But, if you plan on leaving the door unlocked for extended periods of



time, this can be a big deal because solenoids generate heat when they're continuously powered. Over time, the solenoid will heat the lever. Switching to a motor means no noticeable heat.

Dormakaba

There is a wide variety of power assist door operators on the market. Dormakaba has several models, such as this unit that can be preconfigured with the low voltage power supply built in. Because most of us aren't electricians, it has a standard plug-in cord. This can be a big advantage, as we don't need to coordinate with an electrician to hardwire the operator.



STANLEY/BEST

People are living longer, but longer life means older people need a place to live with some assistance. Simply stated, the assisted living market is exploding. STANLEY/BEST, like many manufacturers, recognizes this and the need for people to feel "at home" and not like they're living in a hospital. One way to do this is to make the rooms in assisted living communities look like apartments or homes, and that begins with the door and the lock hardware. Offering levers and finishes that look more residential while maintaining a commercial grade 2 or better quality is one way to do this. Although these locks are commercial grade, they mimic the look of residential hardware.



Adrian Steel

Adrian Steel offers some great cabinets for vans and trucks. Being at the convention allows you to have a conversation about how to configure your van. Preconfigured cabinets can be a real time saver, and time is money.





SnapSafe

SnapSafe was another new exhibiter this year. They offer a variety of safes and two sizes of vault doors. They come in 32" and 36" widths.



AMSEC

AMSEC has redesigned their 30-minute burglary and 30-minute fire-rated safe and dropped the Smith & Wesson name off, bringing the price down.



Hollon Safe

Hollon Safe out of south Texas offers a wide variety of safes, including this one that's available with this jewelry box interior. All the drawers have different configurations for holding everything from earrings and necklaces to watches and bracelets. The insert is available as both an insert and preinstalled. Hollon Safe has many other safes, including a new throughthe-wall deposit safe.







TimeMaster

TimeMaster is now supplying a dial puller designed by Gerry Forder out of Australia. Jeremy Moncrief is now making them in the U.S. (with Gerry's permission), anodizing them in a green finish. This is probably the best dial puller on the market today. Also available is Jeremy's AMSEC drill template for the StrongArm MiniRig or Lockmasters Bullet rig.



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Sargent and Greenleaf

Sargent and Greenleaf is always innovating new products. Several gun safe manufacturers asked for a less expensive safe lock to compete with some of the offshore products. The 1004 is the swing-bolt design to fill this need. As a safe tech, the first thing I noticed is the large hole in the lock body. This negates the need to install an internal relock and an easy spin dle hole attack to spike it.



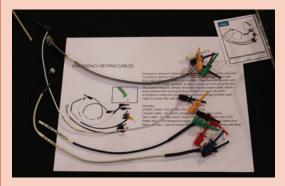


At the other end of the electronic lock spectrum is their A series locks, including a model for the ATM market. The A series has both a display and USB connection to download audit trails. The lock communications are digital instead of analog.



Taylor Technologies

Ryan Taylor of Taylor Technologies is an inventor of many tools and techniques. In the last few years, he's introduced several tools, including the Phoenix and the Jump Box. This year, he redesigned the Jump Box to have a rechargeable battery. The jump box opens many electronic locks simply by providing a slightly higher voltage than the 9-volt battery at 10.1 volts and, more importantly, a much higher available current up to 7 amps to boost the lock open.





Ryan also makes it easy for safe techs who open e-locks. One of the many causes of lockouts is cut cables. These emergency clip cables allow you to strip back the jackets and get one more opening.

Lockmasters

Lockmasters is always a must stop for me. A couple of new tools for safecrackers from Joe Reustle are available through them. The top one is a tool to realign the wheels of a LA GARD 2200 series lock. The others are various wire loop tools for pulling back relocks.



Lockmasters

As someone who has who's opened way too many GSA containers to count — including many using method two by cutting the lock bolts — I can tell you I always chose that method as a last resort. That may change as soon as I receive this new drill rig designed by Brian Lamb. According to Brian, it only takes a few minutes of drill time once this rig is attached to the front of the drawer to hole saw through the bolts of a Class 6 red label, and just a couple more for the Class 5. This method is going to become the only feasible method once the glass relock plate is the predominant hard plate used on new containers. I'll report back on my experience with it in a future issue.



ASSA ABLOY HES

ASSA ABLOY HES offered a free tool to anyone at the convention who installs their electric strikes. This is a template tool that allows a technician to accurately mark the exact cutout necessary for the wide variety of strikes in their line.



ILCO

This tool was developed by Silca and is now in prototype by ILCO. The Optika is an optical reader or recognition reader to assist in finding the correct key blank. It was originally targeted at hardware stores but is great for new shop employees. The programming will recognize more than 700 keys, but it can hold 25,000 key profiles. They will eventually have the entire ILCO catalog and possibly the Silca catalog loaded into it as well.



IDS

The next tool is great for the automotive tech. It's a medical-grade scope from IDS (formerly MDS) that will allow you to look into locks and read the numbers on the tumblers. It even has a pick-like arm that allows you to move all the tumblers out of the way to focus on the end of the arm and see the numbers as you slowly pull it out of the lock.



Access Tools

Access Tools has a great selection of car opening tools, and they had a few new ones this year. This kit contains several new tools, including the opening tool for the new Fiat/Dodge van seen on the left side of the picture.



KEY-BAK

West Coast Chain, or KEY-BAK, has been sold by our industry for years. They've expanded their product line to include something that anyone who's worked at heights will appreciate: It's for dropped object protection. Any safety person will tell you how hazardous dropping a tool off a man lift or scaffold can be; a wrench dropped from 50 or 60 feet can be lethal. OSHA is mandating that all tools be attached to a tether. These even have breakaway strap to break the fall for up to a five-pound tool. If someone drops the tethered tool, it will pull apart. There is a message telling the worker to replace the tether.



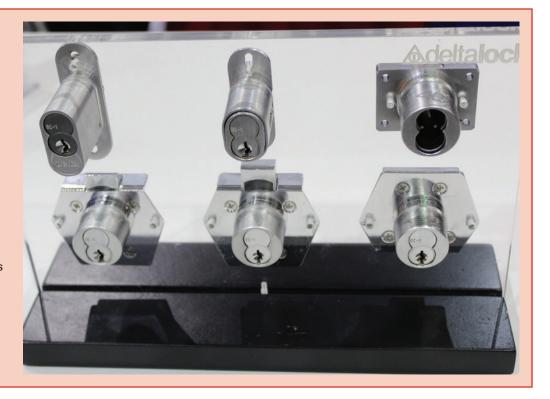
Another new product for West Coast Chain is a KEY-BAK with stops. This has been requested for years by workers who need to leave their keys in a door as they work. These are perfect for arcade or casino workers that need to load machines.



Killeen Security Products (KSP)

KSP makes some great interchangeable cores. Recently, Delta Lock approached them to distribute their showcase lock line. It makes sense for Delta Lock to have a company such as KSP distribute for them. Delta Lock is an OEM, used to selling in hundreds or thousands of units at one time, and they don't make I-cores. KSP has the connections in the lock market to allow them to provide the locks in smaller quantities through distribution to the locksmith.

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Lucky Line

A locksmith convention would be incomplete without keys. Lucky Line has a few new blanks. They've added to their key shapes line and also added forged keys. According to Lucky Line, they're made from an alloy that won't harm your key machine cutters.



Wilson Bohannan

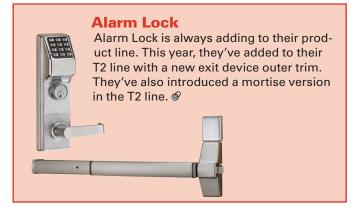
Wilson Bohannan has been making quality padlocks in the U.S. for many years. They now offer laser engraving, locks with a Master padlock 1K keyway and a stainless steel grade 6 shackle equivalent to a boron alloy.

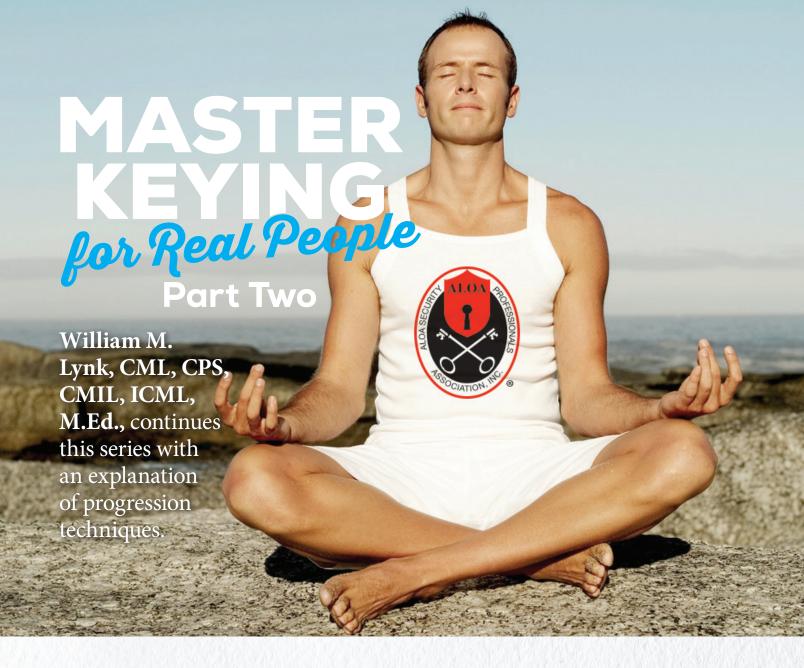




Greg Perry, CML, CPS, is a certified master locksmith and certified professional safe technician, working in all phases of locksmithing. He has taught various locksmith topics for 10 years. He currently works in the public sector as a locksmith. He has worked in the hardware

industry since 1975 in wholesale, retail and institutional settings. He has written extensively for locksmith magazines and is a five-time *Keynotes* Author of the Year. Any opinions expressed by Greg in his articles are his alone and do not reflect any official government position.





OW THAT WE'VE INVESTIGATED THE BASICS OF MASTER KEYING IN installment one, we can successfully delve into the techniques used to progress — the meat of master keying. That involves progression types, progression methods and progression formats. Off we go!

Master Keying Progression Types

The way in which we progress our bittings with respect to the allowable distance from one bitting to the next bitting that may be used is known as progression types. Some of these include: single-step (one step), two-step (double step), three-step, etc. and are determined based on the increment system being used.

Lock manufacturers have created many different pinning systems over the years. Some manufacturers, such as Corbin Russwin, have many systems in the market. The incremental difference from one key cut depth to the next successive key cut depth, which also corresponds to the related pin tumblers, is known as an "increment." The definition is as follows:

increment - n. A usually uniform increase or decrease in the successive depths of a key cut, which must be matched by a corresponding change in the tumblers

For many years, the industry has accepted .023" as a minimum depth increment for standard pin tumbler cylinders using a conventional pin diameter of .115". However, because of the reduced pin diameter of .108", small format interchangeable cores can work effectively with .021" as a minimum depth increment, as used in the single-step, A4 system.

Here are a few common manufacturer increments for you to peruse:

ASSA Twin: .0236"
Arrow (non-IC): .014"
SFIC (A2): .0125"
SFIC (A4): .021"
Corbin (System 70): .028"
Corbin (pre-System 70): .014"
Dexter: .015"
Kwikset: .023"
Medeco (Biaxial): .025"
Russwin (System 70): .028"
Sargent (Conventional): .020"
Schlage (Conventional): .015"
Yale (Conventional): .019"

From these increment systems, and the preceding explanation, it should be easy to see which systems *must* be two-step and which must be one-step. To recap: For less than .023" (except SFIC), they will be two-step increment systems. If equal to or larger than .023", they will be single-step systems. Here is a sampling of such manufacturers:

Must Use Every Other Bitting (Two-Step)

Arrow (non-IC): .014"
SFIC (A2): .0125"
Corbin (pre-System 70): .014"
Dexter: .015"
Russwin (pre-System 70): .015"
Sargent (Conventional): .020"
Schlage (Conventional): .015"
Yale (Conventional): .019"

Can Use Every Consecutive Bitting (One-Step)

ASSA Twin: .0236" SFIC (A4): .021" Corbin (System 70): .028" Kwikset: .023" Medeco (Biaxial): .025" Russwin (System 70): .028"

If we were to use a small increment system, such as Schlage .015", and use it as a single step (no!), then we would run the huge risk of key interchange and possible cylinder failure. To follow is an example of such a disaster, done by illustrating some example sequential bittings. Notice the only change is in the far right column.

Example of Very Bad

All bittings ending in an odd number should be eliminated. Every other bitting could cause problems! One-step progression type is shown here (not good!).

TMK:	37460
CK#1:	59641
CK#2:	59642
CK#3:	59643
CK#4:	59644
CK#5:	59645
CK#6:	59646
CK#7:	59647
CK#8:	59648

Example of Very Good

The bittings ending in an even numeral are OK. The same parity is used in each column, and the two-step progression type is shown here.

TMK:	37460
CK#1:	59642
CK#2:	59644
CK#3:	59646
CK#4:	59648

The Powers That Be

Nature can do some extraordinary things. We can see wonderful patterns, from snowflakes to the geometric beauty of a starfish. Within our master keying universe, double-step progressions or single-step progressions can be expressed simply as powers of 4 or powers of 5.

Powers of 4 shows that patterns reoccur in groups of 4 sequential bittings. When we use "every other bitting," we stay in parity, or use only the odd numbers (1,3,5,7,9) or only the even numbers (0,2,4,6,8). Notice that they occur in repeating groups of 4s. We would never mix odd and even in the same column (chamber).

Powers of 5 shows that patterns reoccur in groups of 5 sequential bittings. Because parity here is not an issue, we can use every bitting in sequential order, integrating odds and evens as if one big happy family. Now we can joyfully mix odd and even in the same column (chamber).

The two "powers" charts show the number of bittings (progressives) per chamber, the progression type, as well as how many total key bittings you can possibly derive from either a 5-pin, 6-pin or 7-pin cylinder, though not all may be useable

Powers of 4 4 Progressives (per Chamber) Base 4 (Counting per Chamber) 2-Step (Progression Type) 1,024 4,096 16,384 5-pin cylinder: 1 page = 64 changes 16 pages = 1,024 changes6-pin cylinder 1 page = 64 changes64 pages = 4,096 changes7-pin cylinder 1 page = 64 changes256 pages = 16,384 changes

Figure 1. Powers of 4 shows that patterns reoccur in groups of 4 sequential bittings.

Powers of 5

- 5 Progressives (per Chamber)
- Base 5 (Counting per Chamber)
- 1-Step (Progression Type)

5	25	125	625	3,125	15,625	78,125
5-	pin cylir	ider:	. •	= 125 ch es = 3,12	•	es
6-	pin cylir	ıder		= 125 ch es = 15,	U	nges
7-	pin cylin	der		= 125 ch	•	naes

Figure 2. Powers of 5 shows that patterns reoccur in groups of 5 sequential bittings.

bittings (Don't worry about the pages reference, as that will be described later in our discussion).

Progression Methods

Master Keying Progression Methods

One of the most common methods of master keying is total position progression (TPP), used especially with larger master keyed systems. Another popular method of master keying is rotating constant method (RC). It's well suited for very small systems. Let's look first at the TPP method.

total position progression (TPP) - n. a process used to obtain key bittings in a master key system wherein bittings of change keys differ from those of the top master key in all bitting positions

Figure 3 is another KBA example:

TMK:	1	4	7	0	2	8	6
	5	6	9	2	4	6	4
	3	8	1	4	6	2	0
	7	0	3	6	8	4	2
	9	2	5	8	0	0	8
SOP:	С	G	А	В	F	D	Е

Figure 3. In this KBA example, in each column the numerals that follow parity (odd-even pattern), indicating a two-step progression type.

Notice that below each column are numerals that follow parity (odd-even pattern). Thus, this would indicate a two-step progression type (remember that?). If the KBA used odd and even together in any columns, it would be a one-step progression type.

Notice in the previous KBA that nowhere in any column is the TMK numeral used below the black box area. That is forbidden in TPP! It is reserved only for the TMK. A master pin will be used in every chamber of the lock; that is TPP law. The change key bittings will always differ from the TMK bitting in any particular column in the TPP method. This kind of system, as an example, is used by BEST Lock Company, among other lock manufacturers, and is easy to implement and understand. However, it can have a limiting effect on the available change keys and requires more master pins than in a rotating constant method. Reverse engineering of a TPP system is relatively uncomplicated, unfortunately.

Let's make sure we have a firm grasp of the KBA and its parts before we proceed. Don't forget, the SOP (sequence of progression) is the particular order that we will

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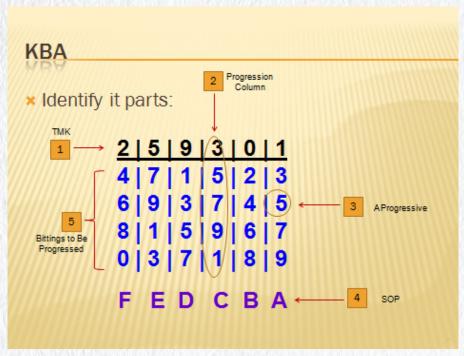


Figure 4. This image shows the different parts of a KBA.

progress the individual columns (Figure 4).

Figure 5 is a colorful graphic that can show more than 16,000 bittings on one page, as well as the same number of pinning combinations. Notice that it's a two-step progression type and uses the TPP method for small format interchangeable cores. Also, Locksoft's PinClacPlus can also produce a color pinning chart. Figure 5 was created by the author.

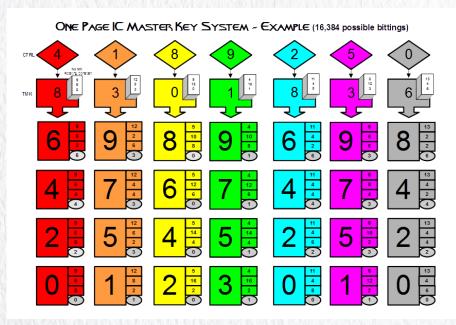


Figure 5. This pinning chart shows than 16,000 bittings and pinning combinations on one page.

"The standard progression format is excellent if one intends on using incidental masters instead of adding master pins to accomplish varied access to similar groups of locks."

The Rotating Constant Method (RCM)

The rotating constant (RC) method of progressing involves using master pins in only certain pin chambers. Here's the definition:

rotating constant method - n. A method used to progress key bittings in a master key system, wherein at least one cut in each key is identical to the corresponding cut in the top master key. The identical cut(s) is moved to different locations in a logical sequence until each possible planned position has been used.

The RC method, quite popular in Europe, uses at least one of the TMK's numeral within the change key's bitting. In that chamber, no master pin is used. This rotation of the TMK is progressed in various patterns to usually yield greater numbers of change keys in systems with fewer levels of keying than compared to the TPP method. Because fewer master

Figure 6.

rigure o.					
			2c/7		
P#1	С	С			
P#2	С		С		
P#3	С			С	
P#4	С				С
P#5		С	С		
P#6		С		С	
P#7		С			С
P#8			С	С	
P#9			С		С
P#10				С	С

Figures 6-7. There are 10 possible ways to rotate the two constant chambers in a 5-pin cylinder, there are 35 possibilities when holding three chambers constant in a 7-pin cylinder.

pins are used, the cylinder is more physically secure and often more challenging to decode than a system using the TPP method. It's extremely suitable to very small systems.

Double Whammy!

What seems to make students cringe at the thought of setting up RC systems is the fact that two things are being rotated: columns and patterns.

Rotating the columns via the SOP for progressives is easy for most of us. We do that in every TPP method system. But, you must consider the fact that you will also be rotating (in an organized manner) the patterns progressed vs. held constant chambers based on the number of changes in the cylinder. What does that mean?

Example: In a 5-pin cylinder, you may choose to hold two chambers constant, and progress the other three chambers. That would reveal a 2c/5 pattern. In other words, there would be ten possible ways to rotate the two constant chambers in a 5-pin cylinder, while progressing the remaining three chambers (*Figure 6*).

As another example, perhaps you will be holding three chambers constant in a 7-pin cylinder and progressing the remaining four chambers. Then you would have 3c/7 pattern chart with 35 possibilities (*Figure 7*)!

Figure 7.

1901071	3c/7						
P#1	С	С	С		WA		20/19
P#2	С	С		С	8,17 (ALA 80 (3)		100
P#3	С	С			С	2000	
P#4	С	С			67.5	С	
P#5	С	С	AN		7.00		С
P#6	С		С	С		373	
P#7	С		С		С		
P#8	С		С			С	730
P#9	С		С	W	P. (II)		С
P#10	С	MAN.		С	С		
P#11	С			С	May	С	
P#12	С			С	100	49	С
P#13	С				С	С	
P#14	С				С		С
P#15	С					С	С
P#16		С	С	С			
P#17		С	С		С		
P#18		С	С			С	
P#19		С	С				С
P#20		С		С	С		
P#21		С		С		С	
P#22		С		С			С
P#23		С			С	С	
P#24		С			С		С
P#25		С				С	С
P#26			С	С	С		
P#27			С	С		С	
P#28			С	С			С
P#29	499		С		С	С	
P#30			С		С		С
P#31			С			С	С
P#32				С	С	С	
P#33				С	С		С
P#34				С		С	С
P#35					С	С	С

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To calculate the amount of bittings you can end up with in a RC method system, you would use a simple 1c/4 pattern chart (Figure 8).

		1c/4				
P#1	С					
P#2		С				
P#3			С			
P#4				С		

Figure 8. To calculate the amount of bittings you can end up with in a RC method system, use a simple 1c/4 pattern chart.

Method

Step 1: Determine the number of progressives per each chamber (as in TPP). Don't count constant chambers used for master key possibilities.

Step 2: Select the appropriate pattern chart for your system.

Step 3: Multiply the number of progressives for the chambers based on each of the appropriate patterns in the chart (remember to use one less multiplier for each constant).

Example:

- 6-pin cylinder
- RC method of progression
- Two-step type progression
- Two chambers for MKs
- One constant rotated

This would use a 1c/4 pattern chart, which has four possible patterns (P#1 – P#4). Each chamber will yield four possible progressives, minus one as a constant, as in this example:

P#1: 4x4x4 = 64 P#2: 4x4x4 = 64 P#3: 4x4x4 = 64 P#4: 4x4x4 = 64

Total = 256. Thus, you will have 256 theoretical bittings to use.

"One of the most common methods of master keying is total position progression (TPP), used especially with larger master keyed systems."

Which Method Should I Use, and Why?

I'm so glad you asked that! Below is a double list that might help to compare and contrast those excellent questions.

Total Position Progression Method

- Master pin is in every chamber
- Change keys and TMK different in every position
- Easy to implement and understand
- Limited keying possibilities in some cases compared to RCM
- Excellent use of incidental masters
- Sometimes easier to reverse engineering

Rotating Constant Method

- Master pins only in certain chambers
- Change keys and TMK the same in certain positions
- Used especially in Europe, but also in USA; excellent for smaller systems
- More expansive keying possibilities
- Use of incidental masters stifled
- Cylinder is more physically secure and often more difficult to reverse engineer
- Suited for lower-level MK systems; not usually suited for higher-level MK systems, as compared to the TPP method

Progression Formats

Formats are basically how we view the system in part or in whole. In other words, the format reflects the way we visually see the bitting information in front of us. This is especially true in a hierarchical sense, as we can see and use a system from various vantage points as demonstrated in much of the master keying software available today.

Choosing Master Keying Progression Formats

So, whether using master keying software or writing out a system by hand, master keying formats must be considered. List format, standard progression format and matrix format all have their place in the world of master keying. And, each is used in a different way.

List format shows the bittings in a sequential list, in a column, such as:

CK1	3492264
CK2	3412264
CK3	3432264
CK4	3452264
CK5	3494264
CK6	3414264
CK7	3434264
CK8	3454264
etc.	

It's as easy at that!

Some master keying software calls standard progression format (SPF) "page view." Here's the definition:

standard progression format - n. A systematic method of listing and relating all change key combinations to all master key combinations in a master key system. The listing is divided into segments known as blocks, horizontal groups, vertical groups, rows and pages, for levels of control.

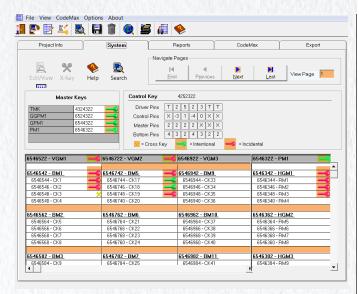


Figure 9. This was created with HPC's MasterKing software using "Page View."

The standard progression format is excellent if one intends on using incidental masters instead of adding master pins to accomplish varied access to similar groups of locks. *Figure 9* is an example using HPC's MasterKing software. They call it "Page View."

As you can see, it provides a clear, visual way to distinguish between groups of bittings that have common features, allowing for the implementation of various mid-level masters. The various types of incidental masters, such as block masters, column masters, line masters, page masters, etc. are shown in bold, and can be master keys ready to use, without having to add any additional master pins into a cylinder.

One "page" in master keying lingo is either a group of 64 bittings (powers of 4; two-step) or a group of 125 bittings (powers of 5; one-step). Visually, the groupings are very clear in standard progression format and show the special relationships between the bittings and the masters, not evident in list format.

Matrix format is essentially a small graph that uses the KBA and a chart to show perhaps thousands of bittings on less than a single page by using squares on a grid.

The definition is:

matrix format - n. A method of generating combinations and assigning key symbols in a master key system through the use of a matrix.

This format can be used with two levels of keying or higher. Matrix format has another advantage, as stated by Billy B. Edwards, CML, master keying expert and author: "It is excellent,



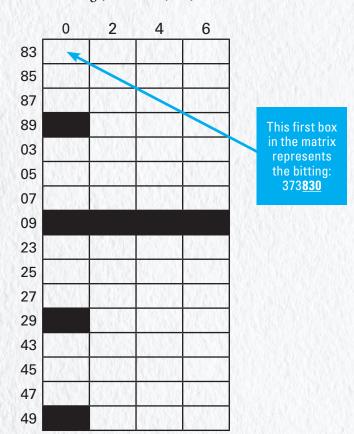
as it can allow for systematic randomization, which makes reverse engineering very difficult."

Basic decoding is simple, but necessary in this format. This next example was provided by Jerome V. Andrews, CML, another master keying expert:

KBA

3	7	3	6	1	8
			8	3	0
			0	5	2
			2	7	4
			4	9	6

TMK: Matrix: Schlage; MACS = 7; 0-9; RC Method



- Black boxes indicate MACS violations.
- Each square represents a bitting, related to the KBA.
- Draw an imaginary line from the number on the left across, and the number on the top down. Where they intersect will be a bitting.

"List format, standard progression format and matrix format all have their place in the world of master keying. And, each is used in a different way."

Temporary Conclusion: There's Even More!

This second installment in the master keying series touched on the broad concepts of a few basics and the three progression techniques of progression types, progression methods and progression formats. But, it did not address anything concerning cross keying, the standard key coding system, selective masters, record keeping, designing a TMK and control key, decoding from the TMK, unplanned master key system contingencies, MACS management, multiplex keyways, master keying LFICs and SFICs, master keying master ring cylinders, setting up for a keying conference, expanding an exhausted system and other related topics.

In our next wildly exciting installment three, we will venture into the "Eight-Step Program to Designing a Master Key System, Leading to Peace and Happiness." You'll be taken by the hand and shown exactly what you will need to do to correctly and effectively master key a cylinder to perfection! Now missing that is truly not an option.

A heartfelt 'thank you' is extended to Billy B. Edwards, CML, Jerome V. Andrews, CML and John Hubel, CML, ICML, M.Ed, for their assistance in preparing for this series on master keying.



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Figures 1-2. These images show a key keeper open and closed.

The Mailman's Key and Other Tales

Tony Wiersielis, CPL, CFDI, talks about key keepers for U.S. postal workers and how to get around some common issues with them.

Y ARTICLE FOR THIS month was supposed to be a continuation of the one I wrote for the June issue, on tool organization. Because of some technical difficulties, that will appear in the October issue instead. This month, I'm going to show you a way to solve a problem for a customer with a unique issue, should you ever run into it. I'm

throwing in some other nifty stuff I've found as well.

The Issue

First, a little background information. I live and work in a densely populated urban area: the New York City metropolitan area. Consequently, there are a lot of multi-family buildings here. In Hoboken, NJ, where I worked for about 10 years, there are city blocks made up of nothing but 10-family brownstones.

Each of these buildings usually has a front door and an inner vestibule door. Often, the mailboxes are on a wall between these two doors. In days gone by, the front door was usually unlocked, with only a passage set to keep the door shut. The mailman didn't need a key to get in to the mailboxes.

Nowadays, with security on every-

"What you've created is the world's smallest master key system."

body's mind, the trend is to lock both doors and have the intercom on the outside of the building. I know this because I installed the hardware on a lot of these buildings. On numerous occasions, the customers wanted the front door locked to keep out keep out the homeless, who sometimes were found in the hallway between the doors. This was particularly scary for young women who lived alone.

Whatever the reason for locking the

front door, it created a new problem: Now the mail carrier can't get to the mailboxes anymore. You might think, "Why not give him a key for the front door?" Not exactly. I'm not sure what the postal regulations say about that scenario, but I can tell you there aren't many carriers who want the liability of a large ring of keys for multiple buildings; it's just too much trouble, if it's even legal.

The solution to this problem, figured out many years ago, is a device called a "key keeper." This is a small box with a lockable, hinged door, installed on the wall beside the front door. *Figures 1 and 2* show one of these boxes open and closed. The reason it's taped closed in the second picture is because there's no lock installed. This is because only the post office has these locks, and they have to install them. You can't buy these locks anywhere

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Figure 3. This photo shows the keyway of a postal lock installed in a regular blue mailbox.

or find key blanks for them. The reason they install them after you're done is because you won't be able to lock the box because they're key retaining.

Once one of these boxes is intalled, a postal employee will install a lock and place a key for the front door in it. Usually, this key has been given to him by the building owner or manager. Sometimes there will be a push button to release an electric strike or maglock. The postal worker locks the box and leaves.

FYI, in 2015 I wrote a two-part series on installing these boxes in wood and brick walls for *Keynotes*. If you're asked to install one, those articles will help you out.

Figure 3 shows the keyway of one of these postal locks installed in a regular blue mailbox. They're also used on the green mail relay boxes you see on street corners. If you work in apartment buildings, you'll also see them at the top of a gang (group) of mailboxes. The mail carrier unlocks the lock and tilts the boxes forward to load them from the top.

Figure 4 is a statue of a mail carrier with a chain hooked to his belt loop. At the other end of the chain is a fairly large key that will open all of these locks within a given area. It's on that chain because it would be extremely bad karma for that key to be lost. A thief who found one of these keys would be able to get into any building in that area with a key keeper on it and probably cause a crime wave.

Aside from getting a key to a building, there are other issues involved with thieves. First, a little history. Back in the 1920s, there were a rash of mail robberies in the United States, usually of mail cars on trains. Back then, registered mail was used to send money and negotiable securities, so there was plenty of reason to rob a train.

The situation was so serious that the president ordered U.S. Marines to serve

as mail guards on the trains. Their orders were to shoot to kill and "that the mail must be delivered, or there must be a Marine dead at his post of duty." Strong words, but the robberies ceased immediately.

Fast forward to today. What are the thieves looking for in the mail? Nobody sends money any more, right? How about credit card applications, checks and anything else that can be used for identity theft? My brother and I watched a recording of a young couple breaking into 18 mailboxes in one of his apartment buildings. They were caught, but you get the idea

The Mailman's Key

What I've found is there are times when a landlord or condo association doesn't want the mail carrier to have access to "I can tell you there aren't many carriers who want the liability of a large ring of keys for multiple buildings; it's just too much trouble, if it's even legal."

the building through the inner (or vestibule) door. I don't see it often, but it's out there. There's a fairly simple solution that makes everyone involved happy.

What you need to do is create two keys

with identical cuts. You can use a pair of factory-cut keys if you'd like, but you need to pick a key with at least two shallow cuts to do this.

Using a code machine, cut one or two of the shallow cuts down between four and six increments, making sure to stay within the maximum adjacent cut specifications. This key now becomes the mailman's key. It's cut low so the tenant's key can't be produced by filing down the mailman's key.

What you've created is the world's smallest master key system. When you rekey both doors, you've got master pins in the outside cylinder so the mailman's key will only get him into the vestibule and not into the building itself. Obviously, the tenant's key will open both, and the problem is solved.

When you do this on a building, take





Figure 4. On this statue of a mail carrier, the chain hooked to the belt loop has a fairly large key that will open all of the key keeper locks within a given area.

a look at the other doors the tenants might use other than the front doors. I mean the rear entrance, the laundry room and things like that which are normally locked. If any of the cylinders look worn, this would be a good time to suggest that you replace them and give them new keys.

Here's how you overcome the objection to handing out new keys: If it's Monday, tell them you'll give them the keys that day or the next and will install the cylinders on Friday or some other future date you agree on.

This allows you to key up new cylinders, cut new keys and test every

one if you'd like. The biggest benefit is the landlord or condo president can distribute the keys in advance. They then stick a note under each door (or an email) telling the occupants to have the new keys on their person when they leave on the morning the locks will be changed. Sometimes keys and the note get stuck under the door, but that's all up to the people in charge.

What makes them happy is nobody is stuck standing outside handing out keys at 6 p.m. Incidentally, you don't ever want to hand out keys for the customer in this situation; you don't know whom you're handing them to. That's the responsibility of the customer.

A second benefit is that keys can be mailed to an absentee landlord of a condo unit in advance as well as given to the tenant. That way, both have the keys at the same time on the off chance that the tenant has an emergency. Building managers love doing it this way.

Here's an interesting thing that you'll notice if you do it this way. On the appointed day, ask the tenants coming out of the building while you're working on the front doors a question. "Do you have both the new and old keys?" Two out of four will tell you they read the note or email but don't have the new key. I could never understand this, especially in Hoboken, which was filled with young urban professionals with one or two degrees. Can't make this stuff up.



Tony Wiersielis, CPL, CFDI, Tony Wiersielis, CPL, CFDI, has more than a quarter century of experience and has worked in most phases of the trade

throughout the New York metropolitan area. He was named *Keynotes* Author of the Year for 2016.



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Phone: 386-427-2462 Fax: 386-427-5962

SECO-LARM USA INC

Phone: 949-261-2999 Fax: 949-261-7326 www.seco-larm.com

Securam Systems, Inc Phone: 805-988-8088 Fax: 805-988-1580 www.securamsys.com

Secure- T- Agency (STA) Phone: 514-963-3701

Fax: 514-447-1024

Securitech Group Inc Phone: 718-392-9000

Fax: 718-392-8944 www.securitech.com

Security Door Controls

Phone: 805-494-0622 Fax: 866-611-4748 www.sdcsecurity.com

Select Hinges

Phone: 269-910-1988 selecthinges.com

Stanley Security Solutions Inc

Phone: 317-849-2250 Fax: 317-806-3797 www.stanleysecuritysolutions.com

STRATTEC Security Corp.

Phone: 414-247-3333 Fax: 414-247-3564 http://aftermarket.strattec.com

Trine Access Technology

Phone: 718-829-2332 Fax: 718-829-6405 www.trineonline.com

Ultra Lift Corporation

Phone: 800-346-3057 Fax: 408-297-1199 www.ultralift.com

Vault Structures Inc

Phone: 800-226-3990 Fax: 239-332-5593 www.vaultstructures.com

WFE Technology Corp. - WAFERLOCK

Xhorse USA INC Phone: 407-608-4288

SERVICE ORGANIZATIONS

HelloTech

Phone: 800-640-9005

Lang Labs Inc

Phone: 780-978-1309

Lockmasters Security Institute

Phone: 859-887-9633 Fax: 859-884-0810

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Classified Advertising Policy

Classified advertising space is provided free of charge to ALOA members and for a fee of \$3 per word with a \$100 minimum for nonmembers. Classified ads may be used to advertise used merchandise and overstocked items for sale, "wanted to buy" items, business opportunities, employment opportunities/positions wanted and the like. Members or nonmembers wishing to advertise services or new merchandise for sale may purchase a "Commercial Classified Ad" for a fee of \$4 per word with a minimum of \$100.

Each ad will run for three consecutive issues. For blind boxes, there is a \$10 charge for members and non-members. All ads must be submitted in a word document format and emailed to adsales@aloa.org by the 15th of the month two months prior to issue date. ALOA reserves the right to refuse any classified advertisement that it deems inappropriate according to the stated purpose of the classified advertising section.

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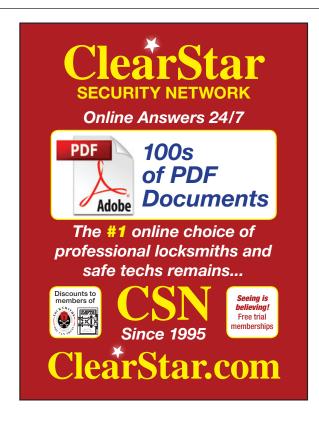
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KEYNOTES

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Advertiser	Ad Location	Web Site	Phone Number/Email
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ASSA-Ruko/Technical Services	page 49	www.assatechnicalservicesinc.com	(724) 969-2595
Big Red	page 49	www.bigredsafelocks.com	(877) 423-8073
Brockhage (Logic America)	page 49	www.lockpicks.com	(800) KEY-BLANK
Bullseye S.D. Locks	page 49	www.bullseyesdlocks.com	(800) 364-4899
Capitol Industries	page 53	www.capitolindustriesinc.com	(800) 567-0451 x392
ClearStar Security Network	page 60	www.clearstar.com	(360) 379-2494
Detex	page 5	www.detex.com	(800) 729-3839
Hayman Safe Company	pages 47, 49	www.haymansafe.com	(800) 444-5434
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