The official publication of ALOA SPAI, an international association of security professionals

April 2023

KEYNOTES

SECURING YOUR SUCCESS

The Safe & Vault Issue

- Identifying unknown safes
- What to do when you don't know what to do

PLUS

Thoughts on Master Keying

Appreciation for Education | Young Locksmith Spotlight | Kwikset SC1 Smart Cylinder Reset Tools

TURN 10®
WHOLESALE SERVICE

1 Per Our Dealer Feedback !

Receive Better Service on Your AMSEC Safe Needs.

NEW DEALERS WELCOMED

Huge In-Stock Inventory:
GUN, Fire, Deposit,Money Floor & TL15/TL30 Safes

- We are Amsec Experts here to help you.
- Superior Safe Packaging (Truck & UPS)
- The Turn 10 Ladies are ready to help you (no phone Tree)

IN-STOCK - HUGE SELECTION FREE Freight Progam (30 States) Deliver in 2 – 3 Days

AMERICAN SECURITY EST 1946 | Gardall | HAYMAN | FireKing

Call the Turn 10 Ladies with your Amsec Needs.

800-848-9790

sales@turnten.com

www.turnten.com

Lisa, Vivian, Tara, Stephanie

THE VON DUPRIN DISTRIBUTOR

And with the best technical sales support in the industry,
SECLOCK is the only choice for door security hardware.

SECLOCK

VON DUPRIN

800.847.5625

SECLOCK.COM

Features

Spotlight

What's New

Departments

FRAMON
PRECISION TOOLS FOR THE LOCKSMITH PROFESSION

CAMPING SEASON IS AROUND THE CORNER!

TKM-100

Code Machine

Framon's TKM-100 is known throughout the industry as the foremost machine in tubular key cutting. Everything you need to originate almost any tubular key in use today is included with the TKM-100

$1899.00

$89.95

Impressioning Tool

A best-seller from Framon that makes key impressioning easier than ever. This tool is self-contained; it needs no wrenches and has no screws to strip out. This tool holds practically any key blank; keys will not rock or slip. The firm hand grip provides complete control when impressioning keys. **Part# IMMS001**

Bullseye Installation Jig

Framon is proud to introduce our latest product, the Bullseye Installation Jig. The new installation jig will assist installers with drilling wood or metal doors, both 2-3/8" and 2-3/4" backset. The tool is completely self-contained besides a 3/32" allen wrench to change bore sizes. **Part# BULL**

NEW

$395.00

Used by thousands of locksmiths around the world - EVERY DAY.

RV Change / Master Key Sets

TriMark RV Master Key Set
20 Key Set. Order Part #BDTMMK - **$119.95**

FIC Change / Master Key Set
3 Key Set. Order Part #BDFICMK - **$26.00**

Global Link Change / Master Key Set
3 Key Set. Order Part #BDGLMK - **$30.00**

FRAMON
PRECISION TOOLS FOR THE LOCKSMITH PROFESSION
WWW.FRAMON.COM
sales@framon.com

BDK
Blue Dog Keys
WWW.BLUEDOGKEYS.COM
sales@bluedogkeys.com

Be sure to check out our new website
www.bluedogkeys.com
to locate those hard to find blanks!

Contact BOTH Blue Dog Keys and Framon Manufacturing Company:
989-354-5623 PHONE | **989-354-4238** FAX | 1201 W. CHISHOLM STREET ALPENA MI 49707

KEYNOTES

APRIL 2023 | VOLUME 69, ISSUE 4

POSTMASTER:
Send address changes to:
Keynotes, 1408 N. Riverfront Blvd., Dallas, TX 75207.

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.

Policies and Disclaimer: *Keynotes* is the official publication of the ALOA Security Professionals Association, Inc. (ALOA SPAI). *Keynotes* does not guarantee the accuracy of any data, claim or opinion obtained or quoted from an acknowledged source. The opinions expressed by the authors do not necessarily reflect the official views of ALOA SPAI. Advertisements and new products or service information does not constitute an endorsement by ALOA SPAI, nor does the Association accept responsibility for the inaccuracy of any data, claim or opinion appearing in this publication due to typographical errors on the part of the authors, Association staff or its agents. ALOA SPAI reserves the right to refuse any article for any reason, and to edit submissions for accuracy, clarity and fairness.

Keynotes (ISSN 0277 0792) is published monthly except for a combined July/August issue by ALOA Security Professionals Association, Inc., 1408 N. Riverfront Blvd., Dallas, TX 75207. Subscription rates are $25 per year for members. Periodical class postage paid at Dallas, Texas and additional offices.

Recognizing Young Locksmiths

Our membership includes locksmiths from 16 to 100 years of age. While a lot of our members started locksmithing as a second career, there are a bunch of locksmiths under the age of 30. We have stated a new feature here in *Keynotes* where they will be featured. They will be submitting a short article and picture explaining why they got into ALOA and what their expectations are. In last month's issue was Fritz Hunter. He is the first and, hopefully, we will have another young locksmith in each issue for some time. If you see them around the conventions and/or classes, stop and say hi to them. It really makes us old-timers happy to see new young faces taking over.

SAFETECH

By the time you're likely reading this, another successful SAFETECH should be in the history books. If you missed it, you missed a great time with a lot of classes and fellowship. If you want to get started in safe work, there is no better place than SAVTA. The classes and instructors are first-rate.

The next ALOA event coming up is the ALOA Convention & Security Expo in August in Orlando. Information about classes, events and the trade show should be on the website shortly, and registration will be available in May. And do not forget the IAAL convention in September. Anyone who does automotive work should be there.

There are also elections coming up. It only takes a minute online to vote. Remember, if you do not vote, you have no right to gripe. Even if only one person is running, vote and show you care about ALOA.

Get Educated

While you can learn locksmithing by computer, most of us learn better via hands-on teaching. There is no better way than having that lock in your hands to see how it really works. I have taken several classes multiple times, and I always learn something new each time. Maybe it's something that the instructor has newly learned and is passing it on, or a new instructor who teaches in a slightly different way. We do not all learn the same way, so taking a class from two instructors allows you to gain different perspectives. Take classes and make money. I hope to see many of you at these events.

Bill Mandlebaum, CML
President
ALOA Security Professionals Association, Inc.
president@aloa.org

"We do not all learn the same way, so taking a class from two instructors allows you to gain different perspectives and techniques."

These Changing Times

We are now heading into spring, and it hardly seems like a quarter of the year has already passed. As the sun starts shining and everything starts blooming, it makes you stop and take in the all of the changes. Changing seasons is inevitable, and so is change in the industry as well. With each year, we see more and more mergers and buyouts, and that consolidation affects everyone in the security industry — fewer distributors, supply chains changing and even some lock shops merging.

Even daily business has dramatically changed: more Zoom meetings, less travel, more people working from home and more marketing being done digitally.

And, sadly, the makeup of our industry's people is changing. As we mentioned un March, we lost ALOA Education Manager Jim Hancock, and his presence at ALOA and beyond will be greatly missed. In the past few weeks, past ALOA President Leonard Passarello has passed as well. He served as president in the late 1980s, but his service to the industry extends far prior to and after that.

At the next convention, class or association meeting you attend, share stories and knowledge with those around you, and learn from your peers. We never know how much time we have on this planet, and there's so much we can all learn from each other while we are here. Don't let your knowledge end with you.

But There's Always the Good

While some of the above sounds perhaps negative, change can also bring good things. The past few years have allowed ALOA SPAI to grow and develop in ways we never imagined. With the increase in technology, we're doing more training and testing online. We're looking into redesigning our website and how we can leverage technology to benefit our members. We have increased our social media presence and continue to connect with our members on all the platforms.

Meanwhile, our members still see the value of in-person, hands-on education — some things you just can't replace. By the time you're reading this, SAFETECH will likely have passed. Thank you to those who attended. It's always a great time to catch up, learn and make new friends. Your next chance for an in-person week of education will be at the ALOA 2023 in Orlando. Join us August 6-12, and class/registration information will be available in May *Keynotes*. Look for more information online as well, including the link to book your hotel room.

Automotive Convention

One wonderful change we've made is forming the International Association of Automotive Locksmiths (IAAL) and organizing its first convention. We're thrilled to do more for our automotive security specialists, and it's exciting to see the convention come together. Join us in Kansas City September 14-16. We truly have some of the best automotive instructors in the world, and we can't wait for you to have a few days of auto-focused classes and events. Registration and class descriptions will be available in June.

Thanks for your membership with ALOA and supporting us through all the changes the past few years. Change may be a given, but we're always striving to make those changes work for you, your businesses and the industry. With your continued support, ALOA can and will do great things. I can't wait to see what we can accomplish together.

Mary A. May

Mary A. May
Executive Director
mary@aloa.org

Save the date!

Join us for the first annual

Auto Lock Expo

IAAL's convention for
automotive security professionals

September 14–16
Kansas City

Details coming soon on ALOA.org

For more information, or to reserve a booth,
email conventions@aloa.org or call (214) 819-9733.

ALOA at the IDN Show

ALOA SPAI was represented by ALOA President Bill Mandlebaum and John Hubel at the 2023 IDN-Hardware Sales Trade Show March 17, in Novi, MI. They were on hand to recruit new members to ALOA, answer questions and promote ALOA Conventions and classes.

IDN-H. Hoffman has a few more events coming up:

- **May 17-18:** IDN-St. Louis Education & Trade Show, St .Louis, MO
- **June 21-22:** IDN-Minneapolis Education & Trade Show, Minneapolis, MN
- **July 29:** IDN-Milwaukee Bratfest Trade Show, Butler, WI
- **October 20:** IDN-Chicago Education & Trade Show, Naperville, IL

ALOA President Bill Mandlebaum and John Hubel represented ALOA at the IDN-Hardware Sales Trade Show in March.

PRODUCT BRIEFS

Lucky Line has introduced locking metal key cabinets that are available with either 20 or 48 hooks inside. It has an adhesive identification label to catalog all the keys with their location in the cabinet, is made of heavy-duty steel, has a continuous piano hinge and comes in a black matte finish. The cabinet has pre-drilled holes and mounting hardware included.

The Liger software of **Keyline** machines has been updated with the new version 4.05.0, DB 3.38, which contains many new cutting systems, many of which are for car keys.

Blue Dog Keys has released the Electric Switch Assortment set, with six electric switch keys covering Leviton, Hubbel, Bryant, Legrand, Pass & Seymour and NSR251. It's part number BDESW and costs $15.95 plus shipping.

IN MEMORIAM

ALOA **Past President Leonardo John Passarello, CPL**, has passed. Born in Italy, he served as president from 1987-1989 and was widely recognized within the industry for his many accomplishments.

ALOA member **William "Bill" J. Smith**, age 91, of Plymouth, WI, passed away peacefully at his home on March 5. He was the owner of Plymouth Safe and Lock as well as Plymouth Fabric Care and Video World. For online condolences, please visit www.suchonfh.com.


William "Bill" J. Smith

ALOA member **Phillip W. Lacy**, 65, passed on March 22. He was the owner and operator of Lacy's 1st Choice Locksmith for over 30 years, working along with his son, David. Prior to locksmithing, he owned and operated Lacy's Corner Market.

NEWS BRIEF

Redford Lock Security Solutions has acquired The Town Locksmith, Plymouth, MI, as of March 1. Its owner, Tom Lewis, is retiring. The Town Locksmith will be moving its entire operation to 46085 Grand River Ave., Novi, MI, into Redford Lock Security Solutions' existing space by June 1.

SAVTA is looking for used safes to use in classes! Donate your safes in good condition by April 10 at ALOA headquarters in Dallas, or bring them with you to SAFETECH in Reno. See page 60 for details.

Young Locksmith Spotlight

In this new series, we will be highlighting some of the youngest members of the trade — in their own words. If you're interested in being featured, please contact editor@aloa.org.

While I never intended on becoming a locksmith, I have now been in the field for three years, and I am loving every minute of what I do. The help I got to move forward in this journey happened in a very short span of time. I was a senior in high school going through a work study program. After no luck finding a job and feeling like I was falling behind, I received a call from my teacher. Knowing I had no experience, training, or even the slightest clue what I was about to walk into, he put every doubt aside and sent me into our local locksmith for an interview. One day later, I got the confirmation text that I got the job.

In my first couple months, I could say it was nerve wracking. I didn't think I was going to understand anything. I didn't know if I was going to succeed in this profession. Oh, how the tables have turned. Everything comes naturally, and I have stopped second guessing myself even with only three years under my belt. Joining Bill Mandlebaum in this adventure has taught me a lot. Being an ALOA member will take me even further on my journey with training and certifications to make me a better locksmith.

For now, I have no set plans. It's hard to think about your future when you haven't really experienced much. I know I'm going to go down many paths in life. I don't know where they may lead me, but I hope to one day to be able to tell you I have my certifications in master and professional locksmithing. It will be hard work, but I know this is a path I want to stay on.

If you had asked me three years ago to master key a lock for you, I would have looked at you like a lost puppy. If it wasn't for Bill being the most patient instructor, I wouldn't have the training I have. You only need one person to believe you can do something, and you can make an entirely new path for yourself.

— Haili Bradley

NEW APPLICANTS

ARKANSAS

Fayetteville
- **Katelyn E. Hicks**

COLORADO

Colorado Springs
- **Bradley K. Stites**
  Sponsor: Joshua D. Sands

Dillon
- **David N. Alexander**
  Blue River Lock and Security LLC
  Sponsor: Gary J. Lorch, CRL

FLORIDA

Spring Hill
- **Toby M. Dow**
  Total Lock and Door Solutions

INDIANA

Evansville
- **Oshri Biton**
  Abra Key Dabra Locksmith Services

South Bend
- **Todd W. Proctor**
  Michiana Lock & Key, Inc.
  Sponsor: Jack W. Seifer, RL

MASSACHUSETTS

Tewksbury
- **Angelo Christopoulos**

MICHIGAN

Ann Arbor
- **Eric R. Bergeron**
  University of Michigan Medical Center
  Sponsor: Virl Mullins
- **Howard R. Ennis**
  University of Michigan Medical Center
  Sponsor: Virl Mullins
- **Samuel C. Heaton**
  University of Michigan Medical Center
  Sponsor: Virl Mullins
- **Caleb I. Spence**

Flint
- **Adam Zuckerman**
  Mr. Speedy Locksmith Service

MISSOURI

St. Louis
- **Matthew E. Wilson**
  Rapid Locksmith
  Sponsor: Wayne Winton, ARL

NEVADA

Reno
- **Aaron R. Brutto**
  Alpine Lock and Key, Inc.
  Sponsor: Patrick Alford
- **Sarah Fow**
  Alpine Lock and Key, Inc.
  Sponsor: Patrick Alford

NEW JERSEY

Highland Park
- **Taiseer Jadalhack**
  On site Auto Locksmith

NEW MEXICO

Los Alamos
- **Herman Manzanares**
  Los Alamos Lock and Key, LLC
  Sponsor: John B. McHale, RL

PENNSYLVANIA

Devon
- **Patrick Conlin**
  Conlin & Co.

Easton
- **Joseph J. Cavanaugh Jr., RL**
  Jedi Joe's Locksmith Service

Lancaster
- **Konstantin Temin**
  Get Cash Fast for Keys
  Sponsor: Jay J. Wiener, CAL

Waynesburg
- **Daniel M. Bartolozzi**
  Dan's Locksmith Service

Williamsport
- **Evan J. Steele**
  Ace Ta Lock and Safe Co.
  Sponsor: Jon T. Rieppel

SOUTH CAROLINA

Sioux Falls
- **Nick J. Pyper**
  Fred the Fixer Inc.

TEXAS

Austin
- **Victoria A. Madero**
  Texas Department of Public Safety

Jacksonville
- **Chris M. Todd**
  JvilleKeys

Mount Pleasant
- **Robert Jones**
  903 Locksmith Services
  Sponsor: Thomas R. Demont, AHC, CFL, CML, CMST, CFDI, IFDI

VIRGINIA

Springfield
- **Mason J. Frey**
  Department of State
  Sponsor: Nanette M. Holbert

WASHINGTON

Oak Harbor
- **Cruz Dicochea Jr.**
  All Island Lock & Key
  Sponsor: Robert S. Badger, RL

Puyallup
- **Zachary Charles Allington**
  Milo's Locksmith & Security Co, Inc.
  Sponsor: Nathan W. Wilson

CANADA

Winnipeg, MB
- **Trevor A. Dawson**
  Kildonan Lock Service Ltd.
  Sponsor: Ronald A. Dawson, CML

MEXICO

San Felipe
- **Guadalupe Barroso**
- **Cerrajeria San Pedro**

ALOA CERTIFICATIONS

CRL
- **Moriel Ben-Dalek, CRL, AFL**
  Chicago, IL

We Need Your Help

Attention, ALOA Members: Help us eliminate the industry scammer problem by screening these applicants, who are scheduled for clearance as ALOA members, to ensure they meet the standards of ALOA's Code of Ethics. Protests, if any, must be made within 30 days of this *Keynotes* issue date, addressed to the ALOA membership department, signed and submitted via e-mail to membership@aloa.org or via fax to 469-543-5241. For questions, contact Kevin Wesley, membership manager, at Kevin@aloa.org or (214) 819-9733, ext. 219.

CALENDAR

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

APRIL 2023

April 17-22
SAFETECH 2023
Atlantis Casino Resort
Reno, NV
conventions@aloa.org
www.aloa.org

April 18
IAIL Webinar Series No. 2 – Introduction to Forensic Tool Marks Identification for Locksmith
Instructor: Beta Tam. Online (Zoom) at 8 a.m.
Register at www.aloamembers.org; More info here: https://conta.cc/3IMfJ0T
www.aloa.org

MAY 2023

May 17-18
IDN-St. Louis Education & Trade Show
St Louis, MO
www.idn-inc.com

May 22-27
Six-Day Fundamentals of Locksmithing
ALOA Training Center, Dallas, TX
education@aloa.org
www.aloa.org

JUNE 2023

June 12-17
Six-Day Fundamentals of Locksmithing
ALOA Training Center, Dallas, TX
Register at www.aloamembers.org
More info here: https://conta.cc/3Ys0vnA
education@aloa.org
www.aloa.org

June 21-22
IDN-Minneapolis Education & Trade Show
Minneapolis, MN
www.idn-inc.com

Succession Planning for Electronics and Software

Build upgrades into your budget — before you need them.

By Steve Fryman, CRL, CAI, CISM, AFDI

In 1987, I bought my first cell phone. Mitsubishi made it, and it cost $1,400. The bag phone weighed 8 lbs. and sported a 10-inch antenna. The cell phone dealer threw in a hernia belt for free. Yes, there was the brick phone, like the ones used on the show *Miami Vice,* but those were way too expensive for a new locksmith service business to purchase. Prior to that, pagers/beepers were used. A dispatcher or answering service paged you with information pertaining to work that needed to be done. This was around the time I started a new business a county away from my father's locksmith business.

The innovative cell phone technology provided an edge for my startup service business. Customers would call from the *Yellow* Pages (For you younger folks, this book was delivered to homes and businesses and provided phone numbers, location and services provided). You, the locksmith, would appear from around the corner in minutes. It was magic. Well, no, not really — it was technology. I've lost track of how many cell phones I have had since 1987.

Succession Planning for Electronic Products

Succession planning for electronics-based hardware and institutional software is critical. The institutions we work for suffer from the lack of succession planning. Action plans should accompany purchases of electronically based hardware and software. I know we cannot encumber funding for an extended period of time. I am suggesting that there are understood provisions made for upgrades as items become obsolete.

I'll give you real-world examples of hardware and software obsolescence. Upon arriving at a new institution as key shop supervisor in 2010, I was faced with a dilemma. The campus was developing a networked access control system. The dilemma was that thousands of standalone electronic locks were deployed all over campus, and these locks were programmed at the door. This meant we had to go in person to the locks to add and remove users, which was a waste of time and energy we couldn't afford.

The networked system being developed had the ability to make changes to lock access from one location in minutes. It also had the capability to instantly lock down all or sections of campus, which is helpful in active shooter situations. The electronic standalone locks served a purpose and were aging out and failing at a rapid rate.

Forward thinking is needed when making initial purchases. Electronics-based hardware will need upgrading. How can we avoid major gaps while upgrading as needed? There should be budgetary provisions made at the time of purchase. This will lessen the shock as systems require upgrades and replacements are required. There never seems to be funding in the budget to maintain the level of security needed. As the locks failed, our facility established a stop-gap loaner system to temporarily maintain the security of the space when the standalone locks failed. This provided time to find funding to replace the locking system with a networked permanent solution. It would not make sense to perpetuate the standalone locking system. Doing that would only be a Band-Aid, not a real solution.

Another Real-World Example

I am a big fan of electronic key management systems. The institution I work for was an early adopter in buying first-generation boxes. Currently, the manufacturer is selling its fourth-generation boxes, some 13 years from when we purchased our first box. The first-generation boxes will no longer be supported with replacement parts and support starting May 2024. Now is the proverbial last quarter of the game, and we are down by three touchdowns. Putting our heads in the sand has not been a viable solution. A final effort toward upgrading is underway in the coming weeks.

Another early-adopter university is in the process of modernization. I am interested in what they are doing to modernize their electronic key management system. I have requested to meet with this university and the manufacturer. This final effort could have been avoided if we had succession planning in place and had made budgetary allocations at the time of our original purchases.

There's a reason my state is the No. 1 university system in the country based on affordability. A lot of our out of state students are paying less tuition than if they matriculated at their state schools. Tight budgets are everywhere; I understand that. All I'm saying is that it would make the heavy lifting lighter if provisions were built in the original purchases. We know how quickly items become obsolete. Unfortunately, the problem has grown exponentially as technology has advanced. I feel like we are running a race against time — blindfolded and with our hands tied behind our backs.

Replacement of Key Issuance/Control Software

We are also in the process of replacing the key control/issuance software used in our key shop. I started this process some six years ago. There were numerous presentations and demos over the six years.

"Succession planning for electronics-based hardware and institutional software is critical."

There have been a lot of changes in our administration for the better, and the current administration is open to upgrading our system. This comes as a great relief, as our systems are beyond broken and crashing all the time. Our administration is open to the upgrading of procedures and software as well. The changes will result in bringing three streams of data into one. The upgrade to one software will encompass handwritten notebooks and two databases. Fingers crossed that we will see this dream becoming a reality.

I don't know the dragons you are slaying now, but don't lose heart. With enough time, change is possible for those who persist. Fight the good fight!

Steve Fryman, CRL, CAI, CISM, AFDI, is a second-generation locksmith with over 45 years of experience. He has been a business owner for 20 years and is currently working at Florida State University as a key compliance manager. Steve is a subject matter expert in institutional shop management.

AUTEL MAXIIM

UNIVERSAL IKEY

AFFORDABLE PROGRAMMABLE OE QUALITY SMART KEYS

2-7 BUTTON MODEL CONFIGURATIONS

130FT FREQUENCY TRANSMISSIONS

700+ VEHICLE KEY REPLACEMENT

- Compatible With Systems Using 315M/433M
- Supports Ultra-Long Range (40 m/130 ft) Frequency Transmission
- Superior, OE-Quality: Meets Or Exceeds Industry & Regulatory Standards
- Multiple Styles Available

PROGRAM IKEYS WITH AUTEL'S ADVANCED KEY IMMOBILIZERS

AUTEL MAXIIM KM100

- 60 Second Key Generation
- Guided Procedures
- Supporting 8 Key Series And 37 Models

AUTEL MAXIIM IM608PRO

- Guided Procedures
- Read/Exact Pin Codes
- Wide (European) Vehicle Coverage

AUTEL MAXIIM IM508

- Read/Exact Pin Codes
- XP400 Required For IKEY Programming

Autel key programming & IMMO products are designed for professional locksmiths & NASTF-registered Vehicle Security Professionals. Please consult the licensing requirements of your local municipality before purchasing Autel's key programming & immobilizer tools.

WEB: AUTEL.COM | **SUPPORT:** 1.855.288.3587
EMAIL: USSUPPORT@AUTEL.COM

FOLLOW US @AUTELTOOLS

AUTEL TECH SUPPORT — WE SUPPORT ASE TECHNICIANS

AUTEL®

Coming Soon: ALOA 2023 Registration

Book your hotel room and keep those dates saved!

Next month, registration for the 2023 ALOA Convention & Security Expo will be available. Get ready to enjoy the cool vibes at the security industry's premier event! Join us in Orlando August 6-12 at the Hilton Orlando for a week of classes, networking and access to the latest products and specials.

The Destination

As most know, Orlando is one of the most family-friendly destinations in the U.S. Come stay a few extra days, bring your family and visit some of the fun attractions all around the city. The hotel has transportation to Universal Studios and provides some discounts for Sea World as well.

The hotel also has an amazing pool complex complete with a splash pad, adults-only pool and a lazy river — perfect for taking a break after classes. Other amenities include complimentary in-room Wi-Fi, 50% off self-parking, two free I-Ride Trolley tickets daily, and more.

And you don't have to wait — you can book your room now! Get the discounted rate of $149 by booking a room in the block by July 14. Call (888) 488-3509 and mention group name "ALOA," or book online via the link on the Convention section of ALOA.org.

Classes

No matter your sector of the industry, there are classes for you at ALOA 2023! From beginner to advanced, and from master keying to electronic access control, we have it all. The class schedule is being finalized and will be available in the registration brochure in May. Look for the brochure included with the May issue of *Keynotes*, and information and a registration link will also be available on the Convention tab on ALOA.org.

Security Expo

Plan to stay for the full two days of the Security Expo, as the floor will be packed with new products and show specials. This is a great opportunity to see all of the latest tools and hardware in once place, plus learn about services that can help your business run more efficiently. Forge closer connections with your reps, and get hands-on product education!

Exhibitors always have show specials, so take advantage of it to stretch your dollars for inventory. We also give out door prizes on the hour, and stay until the end to win a full registration package for ALOA 2024!

IAAL's Auto Lock Expo

While there will be automotive classes at ALOA 2023, you'll have yet another chance for education at IAAL's inaugural Auto Lock Expo in Kansas City. Attend both conventions to get all your education in for the year! Network with other automotive security specialists, find a mentor and learn as much as you can. This will be THE event for the industry, so don't miss it.

Save the dates of September 14-16, and look for more information coming soon on the IAAL tab of ALOA.org and in *Keynotes*.

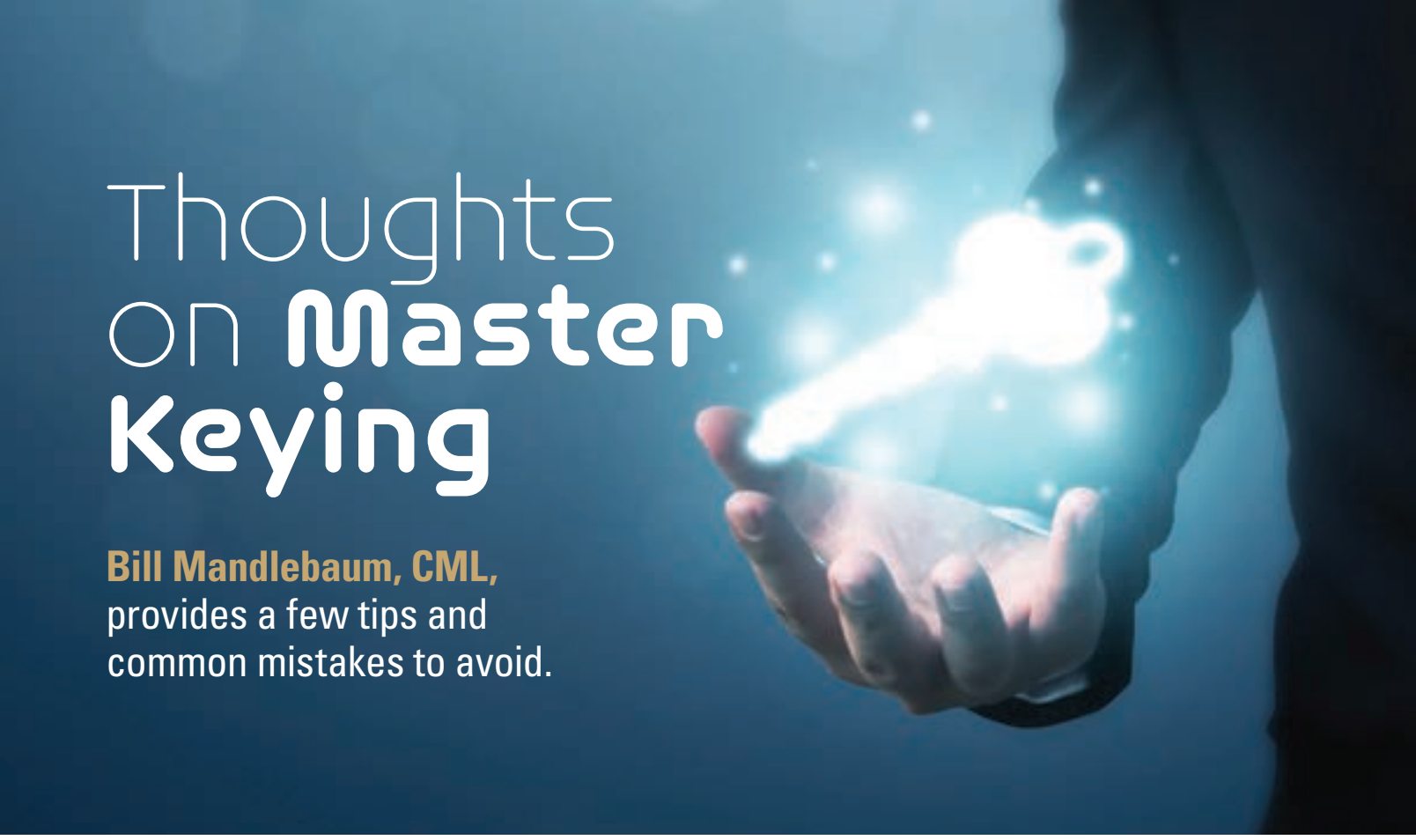
"No matter your sector of the industry, there are classes for you at ALOA 2023!"

Do you want to earn more money, the easy way?

Learn to be a Fire Door Inspector. This class is designed to teach you the right way — not only to do the inspections, but also to fill out the reports and offer a professional fire door inspection report to the owner.

Contact Dawn Chandler at ALOA to sign up for the next class.
dawne@aloa.org

Reserving spots for the May 23-24 session!
https://conta.cc/3nxOLTO



Thoughts on Master Keying

Bill Mandlebaum, CML, provides a few tips and common mistakes to avoid.

There are two main systems of master keying: total position progression (TPP) and rotating constants method (RCM). TPP has a master pin in every chamber, while RCM has no master pin in one or more chambers. There are reasons for using each method. While TPP has more possible change keys, RCM has fewer change keys as more constants are being used, but may offer more change keys if only one constant is used — and it may have more security by being harder to pick, and it resists key manipulation better. A locksmith who does master keying should have a good understanding of both systems to choose what their customer actually needs. This is where taking a good class at either the ALOA Convention or your local association can make a huge difference. A computer program just does not teach you the problems and nuances of master keying.

Large manufacturers will frequently just pull one of the 64 pages of a TPP system to get a small system and then cut the page master for the customer. This is easier than writing new systems for each customer. With RCM systems, the system usually must be designed for that customer.

Another advantage of the RCM method comes about when you get into a system designed by another person (not necessarily a locksmith). We have landlords who buy small apartment complexes that they then want us to service. We take the master key (since they do not want to change that) and find that there are master pins in all chambers. That usually means either a shoebox or a TPP system. Our workaround was a custom table on our ITL 9700 that has expanded root space on the keys. This is also very easy to do on the Framon, HPC 1200 or any other machine that allows manual adjustment of the spacing. That allows the keys to sit on the flat (not the slope of the cut), so the amount of wear does not matter. You never want to pin on the slope of the key cut because it will rapidly wear enough for the key to quit working, and you will have a tough time duplicating it. The downside to this is that you lose some keys to MACS. This complex only has about 120 apartments, so it wasn't a big deal. We can now use either Weiser or Kwikset replacement cylinders in a Schlage-type deadbolt for replacement going forward. We usually use either Ilco or GMS.

Beginner Mistakes

Beginning locksmiths (and non-locksmiths) frequently make the mistake of "shoeboxing" their master key systems. They take the keys that come with the locks and just add master pins to make both keys work. This creates the problem of key interchange. We once had a motel with Dexter Grade 2 locks on the rooms. They called us because they had one key

that would fit several rooms. The system was about 15 years old, with the usual fair amount of wear. When we looked at the key, it had the same cuts as the master in four chambers, and the fifth chamber was off by .015 (one cut). This key should have fit almost every lock in the motel. When we had rekeyed their new addition, it was Arrow, and we designed the system. The maintenance man asked us why our keys did not have the cuts stamped on them. That was when we discovered that the old section had been shoeboxed.

Some Sneaky Tricks

Now let us get into some sneaky tricks that older locksmiths have discovered. Say you have a Schlage 5-pin system (with no way to expand it to 6-pin) and want more change keys. Corbin-Russwin solved this problem by going to the System 70 pinning. If you are re-pinning the whole system, you can do the same. You use the Schlage spacing (spacing you cannot change) and the Corbin-Russwin depths. This gives you a single-step progression with more change keys. You just need to make a custom table on your key originating machine and keep an eye on your MACS (Maximum Adjacent Cut Specifications). This also has the added benefit of *really* confusing anyone who tries to make keys for the system. If they cut the keys on Schlage specifications, they will almost never be able to make the change key and the master key work. I know one locksmith who cut *all* his master key systems on Schlage depths. It really confused us until we figured out what he did. Then it was easy.

Now let's look at another workaround. We had a Schlage system and wanted to expand it so the old master key will not work and increase the chances of key manipulation working. The lumber company that provided all the construction material for the apartments had furnished Schlage 5-pin deadbolts. At that time, Schlage was furnishing their deadbolts with true 5-pin cylinders — not 5-pin, drilled 6 like now.

> "With **RCM systems**, the system usually must be **designed** for that **customer**."

We took a 6-pin blank and cut it back to 5.5. This allowed the tip to *just* hit the back of the 5-pin cylinder. Then we cut a No. 5 depth on the sixth cut. This allowed a new master to fit all the old and new cylinders. Then we switched the old cylinders out for new 6-pin cylinders as we re-pinned the locks. The new keys were all cut on 6-pin blanks. This greatly reduced the possibility of key manipulation since most Schlage keys are 5-pin; therefore, they could not use their parent's house key to try to open these locks. You could use any cut deeper than a 4 on the tip. It just has to be below what the tip of the key would be. This allowed the landlord to add security to the locks as we re-pinned the apartments when students lost keys, without the expense of doing all the locks at one time.

Another apartment complex had Dexter panic-proof locks on it. As you know, the true Dexter line has been gone for many years. These locks are wearing out. The landlord did not want to carry around two master keys. The problem was that Dexter has spacing of .216 from the shoulder. Ilco used to make Dexter cylinders in the Schlage type 99 but discontinued production several years ago. So, we then had to find a cylinder for the new deadbolts. The landlord was using deadbolts and passage sets on all their apartments, so knobs were not a problem. Ilco does make a composite cylinder that would work, but it would be sloppy since the keyway is so large.

Our workaround was a custom table on our ITL 9700 that has expanded root space on the keys. This is also very easy to do on the Framon 1200 or any other machine that allows manual adjustment of the spacing. That allows the keys to sit on the flat (not the slope of the cut), so the amount of wear does not matter. You never want to pin on the slope of the key cut because it will rapidly wear enough for the key to quit working, and you will have a tough time duplicating it. The downside to this is that you lose some keys to MACS. This complex only has about 120 apartments, so it wasn't a big deal. We can now use either Weiser or Kwikset replacement cylinders in a Schlage-type deadbolt for replacement going forward. We usually use either Ilco or GMS.

We are using mainly Schlage-type deadbolts on all these apartments to standardize our inventory. They will take many different cylinders, and we stock fewer deadbolts. Less inventory means better profit due to less dead inventory. Furthermore, if we lose the account, we can just put a different cylinder in them and use them somewhere else. With something like Kwikset, you are locked into that brand since the Kwikset cylinders fit Kwikset locks only.

These are just a few of the tricks we have learned over the years. Special thanks to John Hubel, CML, for his help editing this article.

Bill Mandlebaum, CML, is the president of ALOA SPAI.

IDENTIFYING UNKNOWN SAFES

Pinpointing brands begins with collecting information before you even need it. **By Greg Perry, CML, CPS**

Most safe jobs are relatively routine. Some have great value to share because the safe is rare or has a unique lock, or the opening is just a good story. Sometimes, the job doesn't have enough meat for an article on its own, so I put a couple together for this article.

The majority of safes I work on have a Group 2 footprint lock and require a combination change or simply need to be opened — nothing special in most cases. I prefer the challenge that old safes and locks provide. Identifying the lock or safe maker is always fun. I sometimes wish I lived on the East Coast or at least in an older city to see more of the old stuff. The craftsmanship when things were somewhat custom or handmade shows in how long some of them have lasted.

Back in the 1800s and early 1900s, there were a few well-known companies making safes, such as Mosler, Diebold, Herring Hall Marvin, Victor, Cary, MacNeale & Urban and a bunch of smaller regional companies. Adding to the identification challenge is the fact that many companies purchased or relabeled other brands. Identifying the safe locks installed by even the larger companies can sometimes be a challenge because they used several different locks. The smaller companies can be downright impossible to identify if you don't have a good library — or incredibly difficult even if you're asking for advice on one of the internet forums. The good news is that the smaller companies tended to use the same lock, either making it in house or regularly purchasing the same lock (often from Yale or S&G).

Identifying a Safe

Identifying a safe begins with collecting, studying and sorting information long before you need it. Everyone should have both a digital library and physical library for books and magazine articles not currently available in a digital format, at least until you take the time to scan it yourself. There is no excuse for not having your own library on a laptop or for not taking pictures with your cellphone. Collect all information you can find about safes and locks. I copy many posts from internet forums and scan or download magazine articles like this one.

If you're lucky, the safe still has the manufacturer's name on it. If not, identification starts with looking at the hinges, casters, corners of the door (meaning square or rounded), type of

body and the handle. Next, we move to the lock: Does the handle bind the dial from spinning? How many wheels? Are there any sounds of gears? Can you locate the contact points? How many numbers on the dial? By chance, is there a patent date?

It's a great idea to catalog pictures of the casters, corners, hinges, patent dates, dials and handles by brand in separate documents. If you don't have the safe in your library, then collect all the data on the safe and lock before asking for help on one of the internet forums. Most of us have no issue helping someone who has come to the forums with most of this data posted and perhaps information on the types of tools and skills they have available. On the other hand, many really good techs tend to ignore the requests when someone asks for a drill point on a safe with only a single picture and what appears to be no effort put into trying to identify it first.

Also, don't forget to share, especially if you ask for assistance. That can be on internet forums or by writing articles for *Safe & Vault Technology* or *Keynotes*, two of the best industry publications.

Perhaps one of the best ways to share is at the SAVTA or ALOA conventions. Attending classes or just hanging out at the bars or dinners provides some of the best learning experiences. You get to meet the best in the industry, and more importantly, everyone gets to meet you. The local associations and distributors have some great classes and conventions too.

Following are a couple of rare cast-iron safes with Yale OB locks. By coincidence, the two brands were asked about on a couple different internet forums as I was writing this article.

Figure 1. This old cast-iron safe was made by PacifiCoast Safe and Vault Works out of Portland, OR. There was nothing special about the call. It was somewhat routine: The customer forgot the combination but — fortunately for them and my bottom line — it was open. It did give me a chance to document a safe I have only seen in pictures and that's rarely seen by anyone, judging by the little information I have seen on it.

The dial has the name "Panama" on it, and I don't believe it will give any hints to the lock or maker of the safe. This safe has a Yale OB lock (a hint that a safe might be a Yale OB type lock is that the contact points show up when you turn the handle). Some other locks used by PacifiCoast are the Yale 024, 025 and 028, according to several sources in my database.

Figure 2. The hinges on this safe are surface mounted.

Figure 3. These casters are similar to Cary and others, but there are some differences.

Figure 4. The dial says "Panama," but it's a Yale lock. It's not clear if Panama was a model or indicates something else.

Figure 5. The four bolts are 2½" from the face of the door to the centerline of the bolts. They are located at 8", 15½", 23½" and 30½" down from the top of the door.

Figure 6. Typical of many cast-iron vintage safes, the lock curb extends through a hole in the door.

Figure 7. The lock area without the back cover is shown up close. Yale OBs are best drilled where you can look between the gap where the lever enters the lock case.

Figure 8. A close-up view of the Yale OB three-wheel lock shows the curb in the author's hand.

Figure 9. The date on the wheel is November 20, 05 (as in 1905).

Figure 10. The large inner door was missing the lock, and this safe was missing at least one wood drawer.

Figure 11. This one was made by United States Security Safe. The author opened this safe back in the early to mid-1990s with a little info from the SAVTA hotline and Mike Oehlert.

Figure 12. The author started the opening by drilling a hole between the dial and the handle, thinking it was a larger case, perhaps a roller-bolt-style lock. This ended up in open air inside the safe. But it did allow him to ID the lock as an OB-style lock. The second hole drilled 1 3⁄16" allowed him to carefully enter the lock case and decode the combination. It has a four-wheel Yale OB lock. Today, the author would suggest drilling a little further down to peek into the lock case next to the lever.

Figure 13. This one was drilled before. You can see all the holes between the lock and boltwork. The author's first hole location was chosen because perhaps he saw a patch and followed it. Sometimes that works out; other times (like this one), it was an air hole.

Figure 14. The author patched the holes with some SteelStik putty.

Figure 15. If you look closely, you can see the bottom edge of the hole the author drilled to view the wheel pack. This is a more dangerous location than drilling next to the fence and peeking up with a 70- or 90-degree scope. However, it works great if you only have a straight-view scope or ophthalmology scope for viewing the wheels.

Figure 16. The author removed the lock case. You can see the hole he drilled into the case.

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.

Figure 17. This lock is a Yale OB with four hand-change wheels. The author didn't take pictures of the other side of the wheels, but he doesn't believe they had dates on them.

THE CEDAR CHEST SAFE

A customer was locked out of a beautiful chest with both a combination lock and a key lock.

By Blaine Lucas, CJS, CML, CPS, ARL

Figure 1. The cedar chest had a key cylinder and a combination dial.

Figure 2. The lock is shown up close.

Figure 3. The lock is held onto the cabinet with two screws.

Figure 4. The code "C-020" is stamped on the lock body.

We received a call to see if we could open a cedar chest, as the customer had lost the key and combination. We have done many of these over the years. There are some common keys for them, but I do not remember ever having one with a combination lock.

When I arrived at the job site, I was shown the chest in *Figure 1*. This is not a safe, but it was uncommon and has a dial on it, so I thought readers might find this of interest. Indeed, there was a key cylinder and a combination dial. *Figure 2* provides a close-up view of the lock. The dial is numbered from 0 to 24. The question in my mind was, "Is the key used as an override or used to change the combination like a school locker lock?"

The keyway reminded me of a National wafer lock. I picked the wafer cylinder and turned the dial to open the chest. The dial releases the latch after the key is turned or when the combination is dialed. The lock is held onto the cabinet with two screws and is easy to remove from the chest (*Figure 3*).

Finding Out How It Works

With the lock removed, I took it to the van to find out what makes it tick. In the back of the van, I noticed the code "C-020" stamped on the lock body (*Figure 4*). This also shows the latch, a typical-looking cedar chest lock. These latches were discontinued after several children playing hide and seek would hide in the cedar chest and close the top, automatically locking them in. There is no interior release. As this is an airtight type of cabinet, lives were lost. The newer cedar chests do not automatically lock anymore.

Figure 5. The outer screws mount the lock to the chest, and the center screw holds the key cylinder and dial on.

Figure 6. The key cylinder is shown with the dial-retaining screw removed.

Figure 7. The key cylinder is removed.

Figure 8. The wafer key cylinder is shown.

"The dial releases the latch after the key is turned or when the combination is dialed."

Figure 5 shows us the back side of the lock. There are two outer screws that hold the lock to the cabinet. The center holds the key cylinder to the dial. Once the screw is removed, you can remove the cylinder and the dial. *Figure 6* shows the screw removed and the back of the key cylinder exposed. *Figure 7* shows the key cylinder removed. *Figure 8* shows the wafer key cylinder. There is space for five wafers, but this one had only two in it. The driver is built on the backside of the dial (*Figure 9*).

With the dial removed from the lock, you can see the two wheels and the lever (*Figure 10*). This is a simple lock with an easy-to-pick key cylinder. I could see no way to reset the combination. I made them a key and decoded the combination. I hope you enjoyed this slight departure from safes.

Blaine Lucas, CJS, CML, CPS, ARL, is a third-generation locksmith and president of Foothill Locksmiths, Inc., which offers security solutions to residential, commercial and automotive customers throughout the East Bay in Hayward, California. Blaine's grandfather founded the company in 1956. Blaine was 12 years old when he started working with his grandfather on Saturdays.

Figure 9. Once the screw is removed, the key cylinder and dial can be removed.

Figure 10. The dial is removed, showing two wheels and a lever.

KWIKSET SC1 SMART CYLINDER RESET TOOLS PART 3

In this installation, **Rick Karas, RL, CFDI, AFDI,** discusses the SC1 keyway.

***To learn more about Kwikset's SmartKeys and tools for them, read the first two articles in the February and March issues of* Keynotes.**

When I hear the name Kwikset, I immediately think of the KW1 key blank *(see Figure 1)* with its all-too-familiar shaped bow. Well, it's been a couple of years now since Kwikset introduced the SC1 into its product line. With Kwikset SmartKey security technology, both the KW1 and SC1 are offered. Shown in *Figure 2* are a Kwikset SC1 (red arrow; notice the new-shaped bow) and the Kwikset KW1 key (green arrow).

Figure 1. This is the KW1 key blank.

Figure 2. Kwikset SC1 is on the left, and the Kwikset KW1 key is on the right.

Noticeable Difference in the Cylinders

If you have had the opportunity to rekey a KW1 SmartKey cylinder, you may have noticed that the slot for the learn tool is on the left side of the cylinder at 9 o'clock *(Figure 3)*. A noticeable difference between the KW1 cylinder and SC1 cylinder is that the slot for the SC1 cylinder

Figure 3. The slot for the learn tool is on the left side of the KW1 cylinder at 9 o'clock.

learn tool is now at the 3 o'clock position *(Figure 4).* This is a quick way to identify the cylinder without having to try a key blank. It is a good thing to know, especially if a client can send you a photo of the lock prior to arrival at the job.

Rekeying the SC1 Kwikset Smart Cylinder

The following is the procedure that I take to reset the SC1 Kwikset SmartKey cylinder, and it may differ slightly from the manufacturer's instructions. The following photos are of a deadbolt lock from which I had removed the KW1 SmartKey cylinder and installed a SC1 SmartKey cylinder.

Side note: It's best to use either an original SC1 key or generate a new key on a code machine. I like to use a Rytan punch to make the keys for both SC1 and KW1 *(Figure 5).* When I rekey a Kwikset SmartKey cylinder, I only issue original SC1 keys or ones that I have made with my Rytan punch, and I only warranty with these keys. And, yes, I also charge accordingly for the originated keys. I recommend lubricating the cylinder before the rekeying process to make sure that everything is moving smoothly. I like to use Houdini *(Figure 6),* but you can use what you feel is best.

1. Open the door and put the lock into the locked position. I like to put my tool bag between the door and doorframe so that the door cannot close.
2. Insert the key that currently operates the lock into the cylinder. Note: Make sure that the key goes all the way in. Look at the shoulder of the key and make sure that you do not see a space between the key's shoulder and the cylinder plug *(Figure 7).*
3. Turn the key ¼ turn counterclockwise to 9 o'clock *(Figure 8)* and stop.
4. Insert the SmartKey learn tool into the slot above the cylinder *(Figure 9).*

Figure 4. The slot for the SC1 cylinder learn tool is now at the 3 o'clock position.

Figure 5. The author likes to use a Rytan punch to make the keys for both SC1 and KW1.

Figure 6. Be sure to lubricate the cylinder before the rekeying process.

Figure 7. Make sure that the key goes all the way in.

Figure 8. Turn the key ¼ turn counterclockwise to 9 o'clock.

Figure 9. Insert the SmartKey learn tool into the slot above the cylinder.

Figure 10. The author is removing the SmartKey learn tool.

Figure 11. The new key is inserted.

Figure 12. Turn the key clockwise a half turn to the 3 o'clock position.

Figure 13. Turn the key counterclockwise one quarter turn to the 12 o'clock position.

"It's best to use either an original SC1 key or generate a new key on a code machine."

5 Remove the SmartKey learn tool *(Figure 10).*

6 Remove the key. Important: Remove the key carefully, and do not move the cylinder.

7 Insert the new key *(Figure 11).* Important: Make sure that the key is fully inserted. Once again, you should not see a space between the key's shoulder and the face of the cylinder plug.

8 Turn the key clockwise a half turn to the 3 o'clock position *(Figure 12).*

9 Turn the key counterclockwise one quarter turn to the 12 o'clock position *(Figure 13).*

10 Remove the key.

11 Test the key to make sure that it works that lock.

Figure 14. The Kwikset SC1 Reset Tool has three components: the Reset Tool, the Learn Tool and a SC1 key blank.

Figure 15. Hold the SC1 SmartKey cylinder upside down with the learn slot on the left side at the 9 o'clock position.

Figure 16. The SC1 key blank is fully inserted into the cylinder.

Figure 17. The reset tool has five prongs.

Figure 18. Align the five prongs with the five slots in the cylinder.

Figure 19. Push the tool down and hold the reset tool in place.

Resetting the SC1 Kwikset Smart

There may be time when a key does not exist for a SC1 Kwikset SmartKey cylinder, or something went wrong with the rekey procedure. Here are a couple of specialized tools that can help:

The Kwikset SC1 Reset Tool

The Kwikset SC1 Reset Tool has three components: the Reset Tool, the Learn Tool and a SC1 key blank *(Figure 14)*. As I have previously stated, my procedures may slightly vary from those of the manufacturer; however, they always seem to work for me.

1. Lubricate the cylinder prior to starting and make sure that a key moves in and out of the cylinder smoothly.
2. Hold the SC1 SmartKey cylinder upside down with the learn slot on the left side at the 9 o'clock position *(Figure 15)*.
3. Fully insert the SC1 key blank into the cylinder *(Figure 16)*.
4. The reset tool has five prongs *(Figure 17)*. Align the five prongs with the five slots in the cylinder *(Figure 18)*.
5. Push the tool down and hold the reset tool in place *(Figure 19)*.
6. Remove the key blank.

Figure 20. Firmly holding the cylinder and the reset tool in place.

Figure 21. Turn the reset tool and the cylinder clockwise until it stops around the 1 o'clock position.

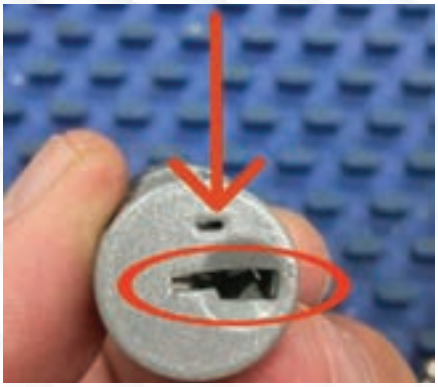


Figure 22. Turn the face of the cylinder clockwise until the slot for the learn tool is at 12 o'clock.

Figure 23. Make sure that the tool is pushed all the way in.

Figure 24. Make sure the key goes all the way in as well.

Figure 25. Turn the key to the 6 o'clock position.

7 Firmly holding the cylinder and the reset tool in place *(Figure 20)* turn the reset tool clockwise until it stops around the 1 o'clock position *(Figure 21).*

8 Remove the reset tool.

9 With your fingers, turn the face of the cylinder clockwise until the slot for the learn tool is at 12 o'clock. See the red arrow in *Figure 22.* The cylinder should now be in the horizontal position (red circle).

10 Insert the Learn tool. You may hear a snap or a click sound. If you do, that is a good thing. It may just be me, but sometimes I don't hear that sound. If you don't, just make sure that the tool is pushed all the way in *(Figure 23).* Then remove the learn tool.

11 Insert the new key, making sure that it goes all the way in *(Figure 24).*

12 Turn the key counterclockwise ¼ turn so that the key will be at the 6 o'clock position *(Figure 25),* and remove it with the key pointing down. *Figure 26* shows the cylinder after the key has been removed.

13 The cylinder is now rekeyed to the new key.

14 Test, test, test the new key.

Figure 26. The key has been removed.

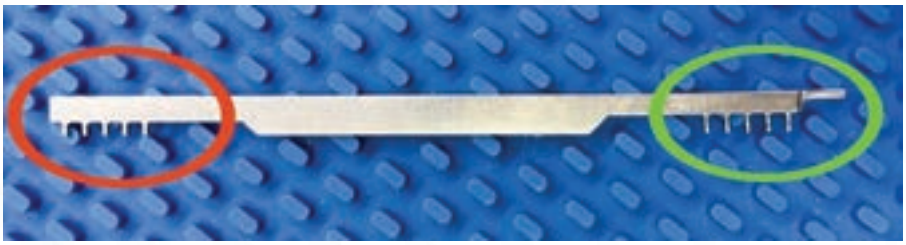


Figure 27. Circled in green is the end of the tool that is used for resetting the KW1 Kwikset SmartKey cylinder, and the one circled in red is used for both the SC1 Kwikset SmartKey cylinders and the Schlage SecureKey cylinders.

Figure 28. The white arrow points to the barb that is used as the learn tool for both the SC1 and KW1 SmartKey cylinders.

Figure 29. Hold the SC1 SmartKey cylinder upside down with the learn slot on the left side at the 9 o'clock position.

Figure 30. The author has inserted an uncut SC1 key blank.

Figure 31. Align the prongs of the tool with the five slots in the cylinder, and press down and hold.

Figure 32. Remove the SC1 key blank while still pressing down with the Better Resetter tool.

The Better Resetter

The Better Resetter Tool (BRT) can be used to reset both the KW1 and SC1 Kwikset SmartKey cylinders as well as the Schlage SecureKey cylinders. Circled in green is the end of the tool that is used for resetting the KW1 Kwikset SmartKey cylinder *(Figure 27)*. Circled in red is the end that is used for both the SC1 Kwikset SmartKey cylinders and the Schlage SecureKey cylinders. The white arrow *(Figure 28)* points to the barb at the end of the Better Resetter tool that is used as the learn tool for both the SC1 and KW1 SmartKey cylinders.

The following reset procedure is how I reset the SC1 Kwikset SmartKey Cylinders with the Better Resetter. My instructions may slightly differ from the manufacturer's.

"The Better Resetter Tool (BRT) can be used to reset both the KW1 and SC1 Kwikset SmartKey cylinders as well as the Schlage SecureKey cylinders."

1. Lubricate the cylinder before starting and make sure that a key moves in and out of the cylinder smoothly. As I have mentioned before, I prefer to use Houdini.
2. Hold the SC1 SmartKey cylinder upside down with the learn slot on the left side at the 9 o'clock position *(Figure 29)*.
3. Insert an uncut SC1 key blank *(Figure 30)*.
4. Take the Better Resetter and align the prongs of the tool with the five slots in the cylinder, and press down and hold *(Figure 31)*.
5. Remove the SC1 key blank while still pressing down with the Better Resetter *(Figure 32)*.

Figure 33. The cylinder is turned to the 1 o'clock position.

Figure 34. The slot for the learn tool is at 12 o'clock.

Figure 35. Insert the barb into the learn tool hole.

Figure 36. Make sure the key goes in all the way.

6 While still depressing the Better Resetter, turn the cylinder clockwise to about the 1 o'clock position and remove the tool. In the photo, I used the tip of the key to turn the plug. You can use a tension wrench or a small screwdriver if you feel uncomfortable using the tip of the key *(Figure 33)*.

7 Continue to turn the cylinder until the slot for the learn tool is at 12 o'clock *(Figure 34)*.

8 Use the barb on the other end of the Better Resetter as the learn tool and insert it into the learn tool hole *(Figure 35)*. You may hear a snap or a click sound; if you fail to hear the noise, just make sure that it's fully inserted. Sometimes I don't hear anything, but it could just be me.

9 Fully insert your new key and make sure that it goes in all the way *(Figure 36)*.

10 Turn the cylinder ¼ turn counterclockwise *(Figure 37)*.

11 Remove the key.

12 The cylinder is now rekeyed to the new key.

13 Test your new key, and then test a few more times.

Rick Karas, RL, CFDI, AFDI, started in the locksmith industry in 1983. A licensed locksmith, he has experience with many physical security disciplines, including access control systems, intrusion detection systems and video monitoring systems. He works in both commercial and institutional settings. Rick owns Phil-Rich Lock, which serves the Washington, D.C., metropolitan area.

Figure 37. Turn the cylinder ¼ turn counterclockwise.

Matt Pylant provides a thought experiment on what to do when you don't know what to do.

It's amazing to think just how many safes there are out there, from the tiniest little drop boxes to massive bank vaults and everything in between. No one person can know it all, and let's be honest: We've all been led around the counter by a customer and come face to face with something we've never seen before — and immediately started to sweat. In my early days as a safe tech, it seemed like every safe was an unknown. I did a lot of sweating.

If you're serious about safe work, I'm sure you have collected a database to dig through in search of information about your next opening. With the dawn of new technologies and social media, we are all now more connected than ever, with more resources at our fingertips. I was fortunate enough to have inherited from my predecessor a full-sized bookshelf loaded to near collapse with volumes of books, notebooks full of articles (alphabetized, even), data sheets, line drawings and digital photos of safes he had personally encountered. Having been handed a wealth of information both in print and from my years of training with a more experienced tech, I learned the trade and gained my own experiences to pass on to my co-workers. I'm sure not everyone has been so lucky, but even with everything I have available to me, I still come up against safes for which I can find no information. Somehow — through a combination of dumb luck, determination and knowledge gained from past experiences — I have managed to get them all open without turning the safe into Swiss cheese or breaking out the 4" hole


Figure 1

Figure 2

Figures 1 and 2. The RCM1000 (*Figure 1*) is the smaller unit, and the larger is a Summit safe (*Figure 2*).

saw. Laugh all you want, but I've seen it done and have photos to prove it.

We all want to give our customer a professional opening with as few holes as possible that can be discreetly repaired and put back into service. Nothing ignites my fury more than hearing about or coming behind a "locksmith" who has taken a grinder to a safe and peeled it open like a can of sardines — thereby reducing the safe to little more than an overpriced boat anchor, all while charging a hefty fee for their "services." I've seen more professional openings from criminals when hauling off a burglarized safe to the scrap yard, and it has no place in our profession (sorry, I'll get down off my soapbox now).

When You Just Don't Know What to Do

What would cause a safe tech to resort to such a destructive opening? Watching too many YouTube videos? Probably, but what it mostly comes down to is lack of information, support and proper tools. So, I asked myself the question: "What do I do when I don't know what to do?" Invariably, you will — at some point in your career — be faced with a safe opening where you come up empty-handed. Even after tapping all of your recourses and using up your one "phone a friend."

The inspiration for this experiment sprung from the fact that I have two safes collecting dust in my garage that I haven't hauled off to the dump yet. No, I'm not lazy. It's because the scrap yard I use will not allow me to dispose of a safe unless it's open. I suppose they want to make sure I'm not hiding any dead bodies in there or unintentionally throwing away some priceless Mayan artifact. Whatever the reason, I can't get them out of my way until I get them open, aaaand — you guessed it — I don't have any information on them. Sadly, this is my own fault. I have serviced and installed quite a few of these units, and never once did I open the back cover to get the necessary measurements and photos. (Shame on me. Maybe I am lazy after all.)

I decided to make this unpleasant task more fun by going through the process of opening these in a way that I hope is also educational. At the very least, I should be able to provide usable drill points for each unit once they are opened.

The Victims

The safes I have selected for this experiment are both made by FireKing and are an increasingly popular type of bill feed safe that uses the MEI bill acceptors and cassettes to store bank deposits for armed guard pickup. The RCM1000 (see *Figure 1*) is the smaller unit, and the larger is a Summit safe (*Figure 2*). Both are brand-new demo models I removed from

Figure 3. The author was able to locate two bolts and roughly determine their thickness.

Figure 4. After getting the safe open, the author discovered a third bolt near the bottom that he had missed.

a bank's corporate offices, so I assume there are no unknown issues; just safes with no code and a remote-mounted lock.

In most cases, the lock body is directly behind the keypad or dial. For an electronic lock, simply follow the wire and ID the keypad and lock body, and you're all set. Even in cases where the electronic lock is not mounted directly behind the spindle hole, with a scope and some bent wire, you can estimate where the lock is mounted on the door and start there. A mechanical dial is similar, but unless you know the handing of the lock, you have a one-in-four chance of drilling it in the right spot. A little searching under safes of the same manufacturer may reveal a pattern or preference for a particular handing, but an educated guess is still a guess. Fortunately, even if you're wrong, the numbers can be transferred to the correct drop-in location with the use of an emergency dial and a great deal of patience.

These two safes are perfect for this experiment because they present the worst-case scenario for an unknown safe: a blank door with a handle. I don't even have a spindle hole to work with. If I wanted to, I suppose I could flip the safe on its back and peek through the bolt holes in the bottom, but I'm trying to simulate a real-world experience. If I really wanted to make this more like being in the field, I could ask my wife to hover too close over me and ask stupid questions like, "Have you seen *The Italian Job*?" or "Where is your stethoscope?" Or perhaps diagnose the problem over my shoulder with: "Feels like the handle is jammed" or "The tumblers must be misaligned." (And after telling me all this, offers me some C4 to finish the job.) As I want to concentrate and analyze the process I go through, I opt not to go with either of these options.

I started with a smaller RCM1000 safe. My first instinct when tackling an unknown unit is to side drill. This will give me the best view of the insides to determine what I'm working with, with the added bonus of not having to deal with hardplate should I actually drill near enough to the lock to hit it. The challenge is to place the hole between the back cover and the lock mounting plate, as sometimes this can be a very narrow window. This safe is installed in an outer shell held in place by a Medeco cam lock. I was gifted a gigantic ring of keys from the manufacturer years ago to make working on these easier, so I actually would have access to the sides were this a real-world job. This also makes hiding the holes easier since it will be concealed behind the outer shell once reinstalled and locked in place.

Sizing Up the Opponent

As with any fight, you have to size up your opponent. I like to start by gauging the thickness of the door and locating the bolts when possible. By using a folded piece of paper, I can work it into the open edge of the door. Then, by sliding it up and down its length, I can get a rough idea of where the bolts are located. Also, by going straight into the open edge until I hit the frame stop, I can figure out how thick the door is too. Using this method, I determine the door is about ⅜" thick, and I was able to locate two bolts and roughly determine their thickness (*Figure 3*). After getting the safe open, I discovered there was a third bolt near the bottom that I had missed (*Figure 4*). This goes to show that this is a very imprecise method, but it will get the job done in a pinch.

Keep in mind there are some safes this will not work on: fire safes that have an interlocking frame and door, full-length bolts and doors with anti-pry pins. Also,

Figure 5. Using a flat wire and my scope, the author placed the wire on the center of the flat edge of the LA GARD lock's swingbolt and marked the depth with a marker on the wire. He then marked this point of reference on the outside of the door.

Figure 6. The first door is open.

be aware that some manufacturers have their detents on the open edge of the door. This may cause some confusion when determining bolt placement. This also works well when you need to locate a bolt to punch or push the bolts back when a handle is damaged or missing entirely. In this instance, I wanted to drill in-between the bolts so as to land inside the back cover. By estimating a ⅜" thick door, I also added ¼" for the frame stop and another ½" to be in the middle of what I'm assuming are 1" diameter bolts. By aiming between the bolts and using my depth guesswork, I came up with a drill point of 6" from the bottom edge of the safe and 2⅛" from the edge of the door.

As a general rule, I like to use as small a hole as possible but tend to go bigger when the possible margin of error is higher and the distance is further. I went with a 5⁄16" HSS bit and drilled through the outer wall of the safe. Once inside, I put a 70-degree scope in and confirmed that my hole was where I wanted to be. I could see a bolt above and one below — perfect! I continued into the edge of the door and, once through, hit another layer of metal. I looked through the hole and moved the handle to confirm it was the flat edge of the boltwork. Once I drilled through that, I was inside the back cover with a great view of the lock. I poked around with a few different scopes, and it was immediately obvious that I was working with a LA GARD swingbolt-style lock. I had a straight view of the flat edge of the swingbolt.

Now that I knew what lock I was working with, I grabbed an old one I'd saved from a previous job that happened to be the same handing and has the right spot drilled already for easy reference. Using a flat wire and my scope, I placed the wire on the center of the flat edge of the LA GARD lock's swingbolt and marked my depth with a marker on the wire. I used that information to mark this point of reference on the outside of the door (*Figure 5*).

Using the old drilled lock, I measured out my drill point, which is 2⅝" from the center of the handle toward the hinges (right). The drill point just happens to be on the same vertical plane as the handle, so there is no up/down measurement. Again, I went in with a 5⁄16" HSS bit in case I was off. Once through the door and into the lock, I could see the bottom edge of the swingbolt. It was an almost perfect shot, but I'm glad I went with the larger bit because the hole is a little off to the right. I was able to get it open with this drill point, but next time I'll drill at 2½" instead. Door number one was then open (*Figure 6*).

Figure 7

Figure 8

Figures 7 and 8. The author worked his drill bit back and forth in the hole at low RMPs and angled the hole down enough to tuck just inside the back cover.

A note worth mentioning: After drilling the lock, the swingbolt jammed with a bit of metal. I was a tad too forceful with the handle, causing the handle cam to bend and slip out of its slot in the boltwork. Since I already had a hole in the side and there are no springs on the bolts, I was able to probe the bolts back without issue once I had retracted the swingbolt. It's worth mentioning this because if you're ever up against one in the field, the handle and cam assembly are very thin and cheaply made, so be gentle with the handle. Even if you do get a little hamfisted like I did, the above drill point I used for the side will get you in.

On to the Second Safe

I was then ready to tackle the Summit safe. I decided to drill this one from the front. As is often the case on a job, you won't always have access to the side, either because it's up against a wall or it's been shoehorned into a set of cabinets, forcing you to go through the front. I honestly had no idea where to start with this one, so I decided to drill 4⅛" above the handle. The drill point I picked is between a service gate that drops down to allow the billheads to be removed for cleaning or to clear a bill jam and the handle. It is also roughly in the center of the door. This should put me above the handle cam and possibly give me a view of the lock body's location. Unfortunately, it did not; in fact, this was such a poor choice I didn't even land inside the back cover. I did, however, graze the top edge of it.

Rather than drill another random hole and hope for the best, I worked my drill bit back and forth in the hole at low RMPs and angled the hole down enough to tuck just inside the back cover (*Figures 7* and *8*). Angling a hole is a great way to avoid a second hole in cases of a near miss. This safe is very thin, and I was able to achieve an almost a 45-degree change of direction. This does not work as well on thicker safes, and the hardplate can also be a complicating factor. But I've been able to move a hole up to about a ⅛" on a thicker door, and sometimes that's all you need to get it open.

After "adjusting" my hole, I discovered that it was still completely useless. Oh well, sometimes that happens. All I could see was a flat plate in front of me that moved when I turned the handle and a narrow view down at the handle cam… no lock in sight. After looking the door over and trying to decide where to drill next, I noticed an oddly mismatched patch of paint to the left of the handle. Upon closer inspection, it appeared that this safe had been drilled before.

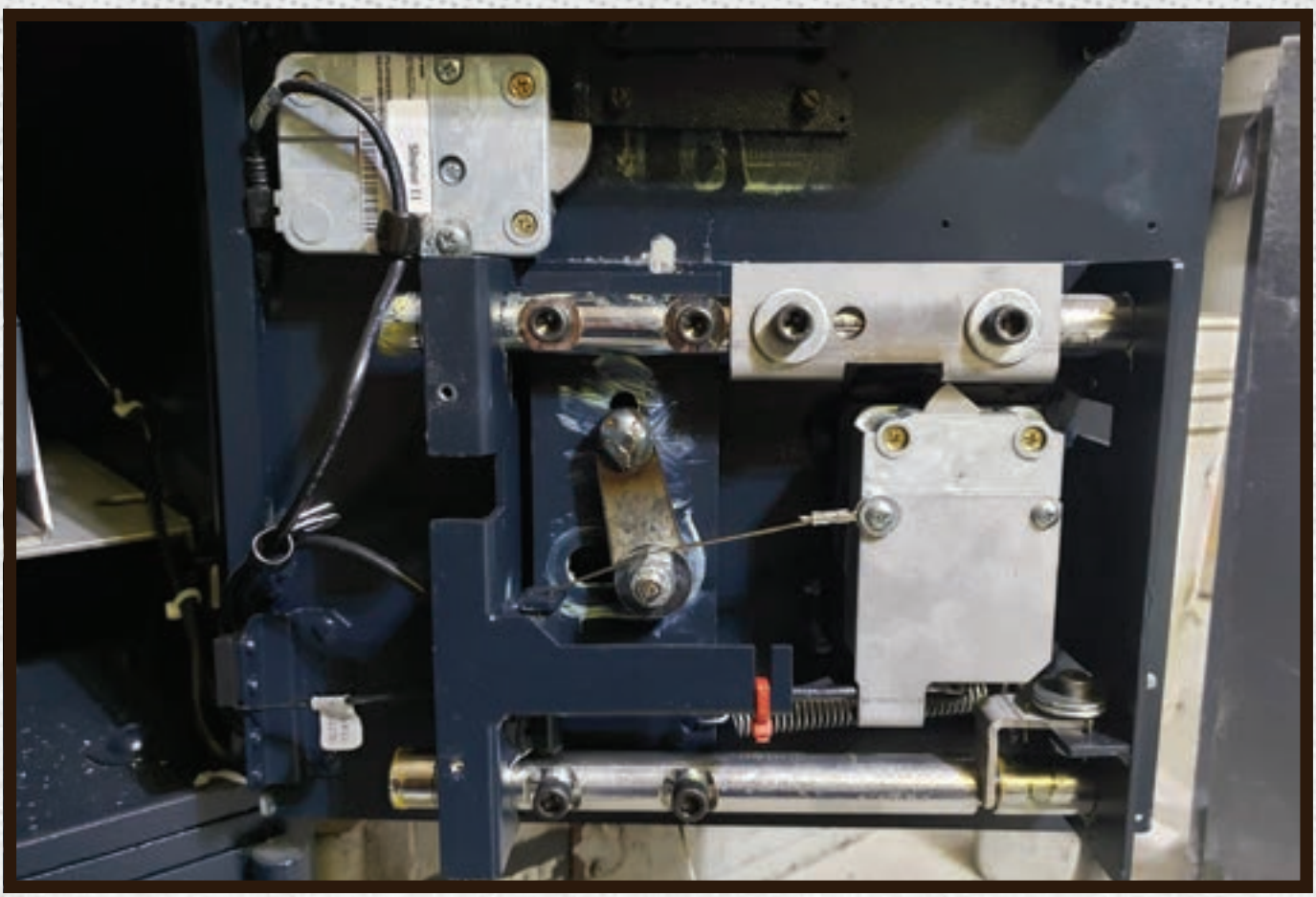


Figure 9. The second door is open.

Door Two Is Open

The hole was located at 3⅞" from the handle center toward the open edge (left) and 1" up. It was a perfect shot to pierce the lock, and door number two was soon open (*Figure 9*). Once the door was open and the back cover was removed, I discovered that there was an external relocker held back by a cable attached to the lock. The drill point for this is 1½" from handle center toward the hinges (right) and 2⅜" down, which will place you in the narrow gap between the relocker pin and the bolt bar, with room to probe the relocker back.

I was definitely bummed to discover the existing drill point. I felt like this ruined what I was trying to achieve by writing out my process, but the truth is that there have been many instances where discovering someone else's previous attempt has gotten me into an unknown safe. I even discovered an alternative drill point for a LA GARD swingbolt once by drilling into an existing patched hole I'd discovered. I also side drilled a safe and was halfway through scoping the change keyhole when I noticed that the combo had been written on the side of the safe, and it worked. Like they say: Work smarter, not harder. If someone else already did the work for you, use it to your advantage. Fortunately, I still had the bottom door to deal with, so it was not a total loss.

The bottom door is actually a separate box bolted underneath the main safe. In cases where there are different compartments in a safe, I like to drill from one into the other when possible. This works like side drilling but can be an even better way to hide an exploratory hole because it remains inside the safe.

I decided to top drill the bottom door. The inside of the top vault is where the bill acceptors and cassettes are housed and — because of limited space to drill and scope — I ended up removing several components to accommodate this process. Despite the extra work involved, I still feel like this was a better option than going through the front. I picked a hole 1¼" back and 2" to the right of the handle inside the upper vault area. I selected this placement because the door was so small that there were only a few places where a lock body could be mounted. I also guessed that it would most likely be a right-hand mount with the handle cam directly engaging the lock bolt; there simply wasn't enough room for anything more complicated.

There were three layers to drill through: the bottom of the top safe, the top of the bottom safe and into the back cover. Once inside the back cover, I was delighted to discover that I was correct in my assump-

Figure 10. The author came up with a successful drill point of 3½" from handle center toward the hinges.

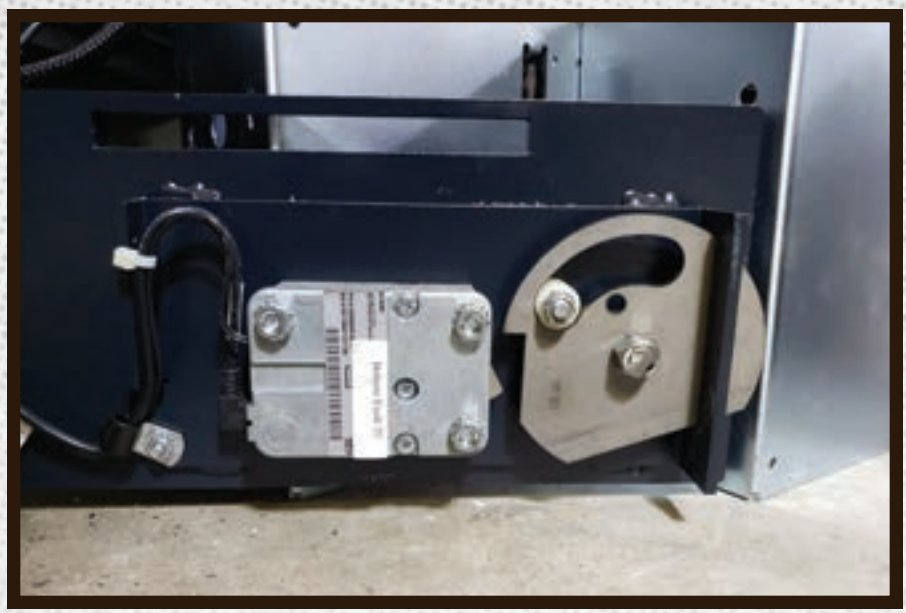


Figure 11. The second safe is open.

tion and had a straight view of the flat side of the swingbolt. Using the exact same method of marking my drill point on the outside of the door using a straight wire (*Figure 10*) and my previously drilled lock body, I was able to come up with a successful drill point of 3½" from handle center toward the hinges (right) and, as with the RCM100, there was no up or down measurement. Door number three was open (*Figure 11*).

In truth, my guess ended up a little high and to the right, but I determined the above measurement is the correct one after getting it open and measuring where I should have been. The benefit to having an example lock handy when guessing at your drill point is that I was able to determine what part of the lock I was in. I adjusted my angle to overcome the miscalculation to hit the correct spot and open the door with the preferred single hole.

Applying This to Future Jobs

With a little dumb luck, persistence and knowledge gained from past experiences, I was able to open all three doors with only two holes each. To be fair, the top door of the Summit safe might have taken two additional holes to open had I not found the existing one. Even with that bit of luck, I feel like this is an opening I can be proud of and could easily be repaired and put back into service if I had the correct replacement hardware (which I did not). Thankfully, these were going to the scrap yard, so I needn't go through the hassle of repairs.

Obviously, this kind of approach won't work on every safe. I am writing very broadly about different things one might encounter in the field, so adjustments will be needed as problems arise. I think what this goes to show is that every penetration into a safe should have at least some thought behind it. What information do you hope to gain from the vantage point you have chosen? I feel it's better to analyze what you have in front of you rather than just stab holes in metal boxes and hope you come out in the right place, without trying to visualize what might be on the other side.

For me, most of this has become intuitive as I have become more experienced and had my hands on more and more safes. At some point, you start to notice patterns on how things work, how safes are built and all the variety of ways you can secure a safe and protect its contents from intrusion. The process of paying attention to and writing down my thoughts while opening an unknown safe has been beneficial to me. Unfortunately, I can't just dump my experiences into another tech's brain; I have to express in words what I'm doing to help train others.

Good, highly trained, experienced safe technicians are sadly an aging and dwindling group. If we don't pass down what we know to a younger generation of locksmiths, we will end up with a bunch of YouTube-trained "hacksmiths" who think an angle grinder and torch are the best ways to open a safe. Please, let's not let this happen. Keep our community strong and be willing to help those who are serious about learning this amazing trade.

The primary safe technician with Champion Safe and Lock in Charlotte, NC, **Matt Pylant** apprenticed with his father and founder prior to his retirement from the company. He has 16 years of experience working on safes for commercial business, residential, industrial and government facilities. He has done service and warranty work for most of the major safe manufacturers, specializing in high-security safes and ATMs.

ALOA

ALOA Security Professionals Association, Inc.

Membership Application

CANDIDATE PLEASE TYPE OR PRINT

Name: ❑ Mr. ❑ Mrs. ❑ Ms. First_____ Last_____ MI____ Designation_____

Business Name _____

Mailing Address _____

City_____ State_____ Zip Code_____ Country_____

Work Phone_____ Home Phone_____ Fax_____

Email Address_____ Website_____

Date of Birth (required)_____ Place of Birth_____ Social Security # (required) _____

US Citizen? ❑ Yes ❑ No If No, citizen of what country?_____

ALOA occasionally makes its members' addresses (excluding phone numbers and email addresses) available to vendors who provide products and services to the industry. If you prefer not to be included in these lists, please check here: o

PROFESSIONAL INFORMATION

Please check the description that best describes you (check all that apply)

❑ Locksmith Owner
❑ Electronic Security
❑ **Institutional**
❑ Other _____
❑ Automotive
❑ Security Professional
❑ Safes
❑ Employee Technician
❑ Mechanical Door Locks & Hardware
❑ Investigative

Are you licensed to perform Locksmith/Access Control work in your state? o Yes o No If Yes, License #_____

Business License #_____ EIN # _____

Any other license held by applicant (Contractors Lic., Low Voltage) _____

Any other states you do business in and licenses held in those states _____

List all phone numbers used by your company/companies:_____

_____

Number of Employees_____ ❑ Store Front Business ❑ Mobile Only

How did you learn locksmithing/access control? _____

How long have you worked in the locksmithing/security industry? _____

ALOA member Sponsor Name/Who introduced you to ALOA?
Sponsor Name (Required)_____ ALOA Number_____ Years known _____

Have you ever been a member of ALOA before? ❑ Yes ❑ No If Yes, when?_____ ID #, if known _____

Are you a member of any local locksmith association? ❑ Yes ❑ No If Yes, name of association: _____

Give the names and phone numbers of two industry-related references:

Name_____ Company_____ Phone Number_____

Name_____ Company_____ Phone Number_____

IMPORTANT: Have you ever been convicted of a felony? ❑ Yes ❑ No If yes, please give details on a separate sheet.
All convictions are reported to the Advisory Committee for review.

A routine background check is performed on all new applicants, unless you live in a State in which passing a background check is a part of the licensing requirements. Non-US citizen background checks are required. If you live in a country that does not allow third party background checks, you will be required to submit an authentic report upon request (no copies/duplicates allowed) before final membership approval can be granted. A copy of your business permit/license, license number, business card, company letterhead or suitable proof of employment in the locksmith/access control business must accompany application.

TYPES OF MEMBERSHIP AND REQUIREMENTS

Check only one box from the categories listed below:

Active Membership
Persons actively engaged in the locksmith/access control industry for a minimum of two years and have achieved one of ALOA's recognized program designations.

❑ US and US Territories	$270	❑ I elect to Go Green	$240
❑ International	$280	❑ I elect to Go Green	$210

International Association of Investigative Locksmiths Membership
Must be an ALOA Member in order to join the IAIL.

❑ US and US Territories	$65

Probationary Membership
Persons undergoing training to qualify as an Active member, who have not received one of ALOA's recognized program designations. No person shall be a probationary member for more than three years.

❑ US and US Territories	$270	❑ I elect to Go Green	$240
❑ International	$280	❑ I elect to Go Green	$210

Probationary Membership – No Sponsorship Required
Persons undergoing training that are new to the industry and do not know any Active member for sponsorship. Probationary period extended from 90 days to one (1) year. Probationary status lifted if sponsor acquired within year. Must obtain license if residing in State requiring licensure. A second background check will be performed by ALOA after 2 years of the 3 year maximum term. Any violation of ALOA Code of Ethics during probationary period will result in immediate termination of membership.

❑ US and US Territories	$270	❑ I elect to Go Green	$240
❑ International	$280	❑ I elect to Go Green	$210

Allied Membership
Persons whose position in the locksmith/access control industry relates to locksmiths, and cannot qualify for any other class of membership.

❑ US and US Territories	$270	❑ I elect to Go Green	$240
❑ International	$280	❑ I elect to Go Green	$210

Note: Your application will be processed with a 90 day waiting period.
Any institutional locksmith not using his/her work address must submit a letter from employer stating that you are an institutional locksmith.

DUES AND FEES

An application fee and the appropriate dues must accompany the application in order for processing to begin.
Application Fees Schedule:

US and US Territories $70
Canada, Denmark, Ecuador, New Zealand $160
Australia, Bahamas, Barbados, Belgium, Belize, Bermuda, China, France, Haiti, Philippines, UK $210
Israel, Korea, Papua New Guinea, Saudi Arabia, United Arab Emirates $360
Applicants from countries not listed must submit background check and report from local Law Enforcement with application.

FINAL CHECKLIST

❑ Required Proof of Employment in Industry
❑ Annual Dues Amount _____
❑ Application Fee _____
Total Amount Due _____

METHOD OF PAYMENT

❑ Check ❑ MasterCard ❑ Visa ❑ American Express ❑ Discover

Card Number_____ Expiration Date_____ SEC_____

Print Name on Card _____

Signature_____ Date_____

I understand and consent that in the course of reviewing this application ALOA may review publically available information for the purpose of verifying the information submitted and do a background check.

I certify that all statements are true and, if accepted as a member, I agree to abide by the rules, regulations, and Bylaws of ALOA, and further agree to adopt the Code of Ethics of ALOA as my own, and adhere to it to the best of my ability. Should my membership be discontinued, I agree to return my membership card and cease use of all ALOA insignia.

_____

Signature Date Signed

Dues, Contributions, Gifts are not deductible as charitable contributions for Federal income tax purposes. Dues payments are deductible as an ordinary and necessary business expense. However, donations made to the Legislative Action Network ARE NOT deductible as a charitable gift or business expense.

Return to:
ALOA, 1408 N. Riverfront Blvd #303, Dallas, TX 75207
Fax (469) 453-5241 • Email: membership@aloa.org

Cloak and Dagger, Part 2

Tony Wiersielis, CPL, CFDI, showcases a few more "covert" lock-picking tools.

Recently, I was sent on a job at a huge public archive building under construction in Pennsylvania. A contractor had installed a bunch of BEST 45H mortise locks, but the levers, rosettes and rose nuts were ordered in the wrong finish. They were brushed chrome instead of stainless steel, and I had to swap them out.

I had bags of rose rings and rosettes, and the levers came by themselves in 45H boxes. Once I started the replacements, one of the first things I noticed was the way the levers were installed by the contractors. Look at the space between the inside and outside spindle in *Figure 1*. Notice the size of the gap. *Figure 2* shows the instructions included in the box, which apparently were ignored by the installers.

Figure 3 is what should have happened. The spindles are turned until they touch each other and then backed off one complete turn, as you see in *Figure 4*. Why?

Figure 1. Note the gap.

Figure 2. The installers apparently ignored these instructions.

Figure 3. Start by turning the spindles until they touch each other.

Figure 4. The spindles are backed off one complete turn.

Figure 5. Here are the old and new parts.

Figure 6. The mark made by the set screw indicated that this was the used part.

Figures 7-9. The author put one of his Leatherman bits in his screw gun.

Two reasons. First, you never want the spindles tight against each other. If they are and the outside hub is locked, the inside spindle might not be able to turn because it's jammed against the outside spindle. This causes a lock-*in* as opposed to a lock*out* — bad news and embarrassing if you're the one stuck inside.

The second reason is the space you see back in *Figure 1.* If the spindles are that far apart, the inside spindle doesn't seat fully in the hub. It's likely that only a small part of it, like a ⅛", will actually be *in* the hub. Thus, all the pressure applied to the hub is on a tiny part of the spindle. Eventually, that pressure causes the spindle to wear away at that point and round out. Then it's only a matter of time before someone moves the lever, it slips and someone is stuck inside. Of course, this could take years, but why not just do the right thing in the first place?

In *Figure 5,* I laid out both old and new parts. It was hard to tell the two finishes apart; they were that close. So, I got called away, and I didn't remember which was which when I returned. Then I noticed what you see in the *Figure 6,* which is the mark made by the set screw, which could only be on the used part.

When I first arrived at the building and was led through a rat maze to where I was working, I realized that I hadn't brought my ⅛" Allen wrench for the set screws. Annoyed, I pulled out my Leatherman bits *(Figures 7* and *8)* and

Figure 10. The screw gun helped to speed things up.

Figure 11. This is what the author normally uses on the set screws.

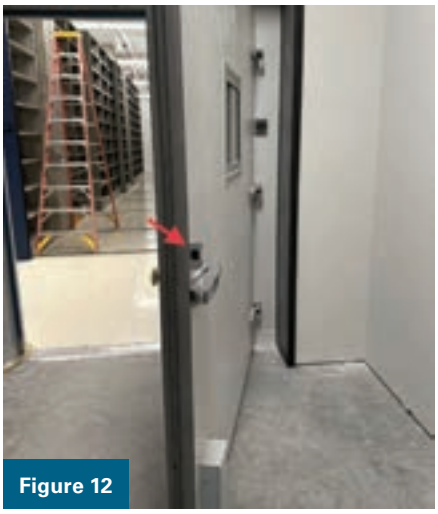


Figure 12

Figure 13

Figures 12 and 13. The red arrow is pointing to the strike for a rim-mounted deadbolt mounted on the frame.

Figure 14. Note the questionable sign.

popped one into my screw gun *(Figure 9)*. I'm using it in *Figure 10*, and it sped things along. The only drawback was that it won't stay in the gun. *Figure 11* is what I normally use and went out to get on my next break.

I passed by a humongous cold storage room with one of those refrigerator door handles you usually see in butcher shops *(Figure 12)*. The red arrow is pointing to the strike for a rim-mounted deadbolt mounted on the frame *(Figure 13)*. The sign on the inside of the door *(Figure 14)* seems reassuring, but it isn't going to release the deadbolt if somebody locks it from the outside.

"You never want the spindles tight against each other."

Figures 15 and 16. The author received these metal cards and survival cards via his subscription to Grimworkshop.com, which led him to their locksmithing items.

Figure 17. This image shows three different size tools and the cordage the tools produce.

Figure 18. The author went through Jungle Environmental Survival Training in the Philippines in 1980.

Figures 19-21. Here are two lock-picking tags and an escape tag.

Cloak and Dagger, Part 2

In my January 2023 *Keynotes* article, I showed you a neat little pick set concealed in an actual lip balm container, called a Spie Stick. Shortly after I sent that to the publisher, I received my monthly subscription package from Grimworkshop.com. This subscription is $20 a month, and I usually receive one of the metal cards you see in *Figure 15,* some bushcraft/survival instruction cards *(Figure 16)* and some other cool stuff.

Look back at the item at the bottom of *Figure 15* at the red arrow. It's used to cut a two-liter bottle into strong thin cordage and is useful for hunting, camping and survival. *Figure 17* shows three different size tools and the cordage they produce. The other tools they manufacture are well suited for those interested in lightweight everyday carry (EDC) items.

I was surfing their website and came across the SERE Cards page. That stands for survival, evasion, resistance and escape. Many members of the U.S. military receive intensive training in this. I went through Jungle Environmental Survival Training in the Philippines in 1980 *(Figure 18).* My biggest takeaway from that was how unpleasant the jungle was to be in, especially in a constant downpour and with God knows what was crawling around underfoot. But I digress.

In that section of the site, I discovered a series of cards, dog tags and microtools devoted to lockpicking and bypassing locks. In the interests of sharing this information with my readers, I purchased every iteration of picking/bypass tools they've made.

Let's start with the dog tag tools. *Figures 19-21* show two lock-picking tags and an escape tag. Make sure you read the instructions on the first card above the tag; it will explain the "tool retention system" and how you can remove and replace the tools. Incidentally, the back side of all these items have a permanent adhesive strip that you can stick anywhere if you don't want to carry them.

"If the spindles are that far apart, the inside spindle doesn't seat fully in the hub."

Take a close look the escape tag in *Figure 21.* The top tool is a handcuff key, and the bottom is a shim for a handcuff's ratchet. On the top and bottom edges are a file and a saw for cutting through plastic

Figure 22

Figure 23

Figure 24

Figures 22-24. These MicroTools can be concealed as zipper pulls or in clothing.

cuffs. The black ring on the right is a dog tag silencer that will fit three of those tools inside of it.

For those who are unfamiliar with dog tags, two of them are worn on a chain around the neck. The silencers around the tags are used to prevent any noise made by the tags clinking together. This could reveal the position of an ambush or stealth movement and could be lethal. Why two tags? In the event of death, one tag goes with the body, and the other is collected for graves registration. Back to the story.

I can tell you that the key and the shim absolutely, positively work. I tried both on a new pair of Peerless handcuffs on one of my wrists. It takes a few minutes the first time you try them, but after that, it's scary how fast they work.

Next are the smallest tools, called MicroTools *(Figures 22-24),* which can be cleverly concealed as zipper pulls or in clothing. Three of these will fit into a MicroTool silencer (not shown, but similar to the dog tag silencer). You'll notice that some of the picks can also be used as tension wrenches. I noticed that some of the micro picks have small holes in them. I'm guessing that might be a way to attach something to the pick to lengthen it. I'll find out and let you know if that's the case.

Now we come to the wallet-sized cards. *Figure 25* is the Grim Key card. The red arrows point to the ends of the file/saw; those

Figure 25. The red arrows point to the handcuff key and shim.

Figure 26. Take a close look at the feeler pick.

Figure 27. Here's a close-up view of the tip after the author put it back on the card.

are the handcuff key and shim. Notice that two of the picks double as tension wrenches. Next is the grim Workshop Lockpick Card *(Figure 26).* Take a close look at the feeler pick. *Figure 27* shows a close-up view of the tip after I put it back on the card. I straightened it out later.

Put to Good Use

Here's why it was bent. I was carrying the cards in my back pocket at the college to show them to the retired cops in the security office. I wound up working on some contractor-installed Detex 230D's. They were installed with standard pin tumbler cylinders, and I was converting them to BEST.

It was drizzling when I got to the last Detex. When I pulled open the door, the cover was hanging off. A closer look at the lock showed why: Some clown had broken the Detex key off in

"I discovered a series of cards, dog tags and microtools devoted to lockpicking and bypassing locks."

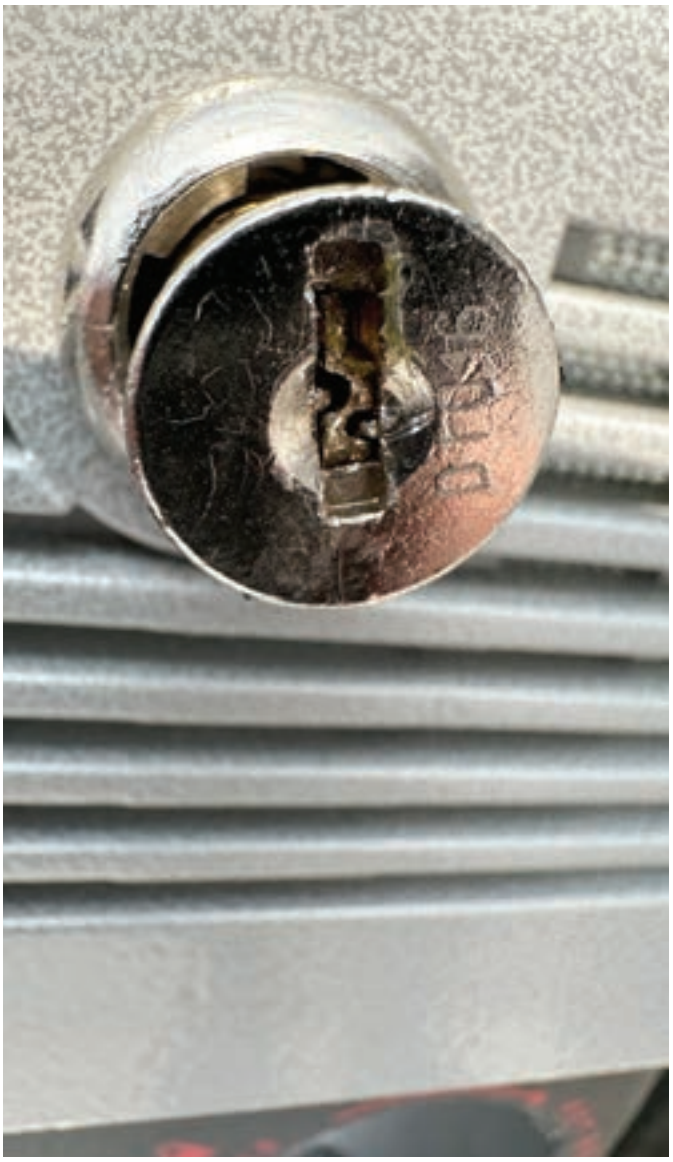
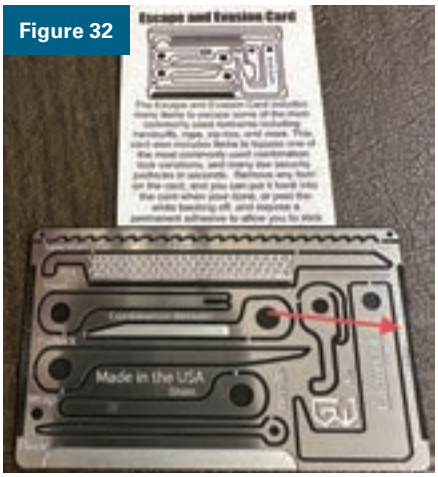


Figure 28. Someone had broken the Detex key off in the lock.

Figure 29. The author put the tip of the feeler pick beside the key and twisted so he could get the key out.



Figures 30-32. Here are the Rake card, a feeler pick/half diamond card and the Escape and Evasion card.

Figure 33. The Bypass card is designed to pull back latches in either direction on simple latches.

Figure 34. The instruction cards are available separately.

the lock and left it that way *(Figure 28)*. I hadn't brought my backpack, so I didn't have my pick set and extractors, and I needed to leave early that day.

I remembered I had the cards in my pocket, pulled them out and peeled the feeler pick off the card. I was able to slide the tip of the pick in beside the key, twist it and pull it out enough *(Figure 29)* to grab it with a needle-nose plier. It saved the day and illustrated how handy even one of these cards can be.

The next cards are *(Figures 30-32)* the Rake card, a feeler pick/half diamond card and the Escape and Evasion card. The E&E card is loaded with interesting stuff, including several saws, a file, handcuff key and shim on either end of the file and a knife at the bottom. It also has a cuff key, a needle, padlock shim, decoder tool, etc. The arrow points to one side of the card that has WRAP engraved on it. It's an indentation that's on both sides and could be used for wrapping cordage or something else around the card.

The last card *(Figure 33)* is the Bypass card, which is designed to pull back latches in either direction on simple latches. I tried it on a mortise lock with a deadlatch and it wouldn't work, but that's to be expected. *Figure 34* shows the instruction cards, available separately.

Tony Wiersielis, CPL, CFDI, has almost 40 years 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 and 2022 and serves as ALOA's Northeast Director. Reach him at aew59@juno.com.

DISTRIBUTORS

Access Hardware Supply
Phone: 800-348-2263
Fax: 510-435-8233
www.accesshardware.com

Accredited Lock Supply Co.
Phone: 800-652-2835
Fax: 201-865-2435
www.acclock.com

American Key Supply
Phone: 800-692-1898
Fax: 650-351-5973
www.americankeysupply.com

Banner Solutions
Phone: 888-362-0750
www.bannersolutions.com

Capitol Industries
Phone: 514-273-0451
Fax: 514-273-2928
www.capitolindustries.com

Car And Truck Remotes.Com
Phone: 678-528-1700
Fax: 844-457-8948
www.carandtruckremotes.com

CLK Supplies
Phone: 800-848-6989
www.clksupplies.com

Direct Security Supply, Inc.
Phone: 800-252-5757
Fax: 800-452-8600
www.directsecuritysupply.com

Dugmore & Duncan
Phone: 888-384-6673
www.dugmore.com

Fried Brothers Inc.
Phone: 800-523-2924
Fax: 215-627-2676
www.fbisecurity.com

Hans Johnsen Company
Phone: 214-879-1550
Fax: 214-879-1520
www.hjc.com

H L Flake Co.
Phone: 800-231-4105
Fax: 713-926-3399
www.hlflake.com

IDN Incorporated
Phone: 817-421-5470
Fax: 817-421-5468
www.idn-inc.com

Intermountain Lock & Security Supply
Phone: 800-453-5386
Fax: 801-485-7205
www.imlss.com

Jovan Distributors Inc.
Phone: 416-288-6306
Fax: 416-752-8371
www.jovanlock.com

Key4, Inc.
Phone: 213-788-5394
Fax: 213-788-5444
www.key4.com

Keyless Entry Remote, Inc.
Phone: 402-671-5100
Fax: 402-671-5100
www.keylessentryremotefob.com

Keyless Ride
Phone: 877-619-3136
Fax: 409-216-5058
www.keylessride.com

Lockmasters, Inc.
Phone: 859-885-6041
Fax: 859-885-1731
www.lockmasters.com

Locksmith Ledger International
Phone: 847-454-2700
Fax: 847-454-2759
www.locksmithledger.com

Locksmith Resource
Phone: 312-789-5333
Fax: 925-666-3671
www.locksmithresource.com

Master Teknik Tasarim Mak San Ve Tic LTD Sti
Phone: +90 (212) 223-0503
www.masterpick.net

Midwest Keyless
Phone: 815-675-0404
Fax: 815-675-6484
www.midwestkeylessremote.com

RAE Security, Inc.
Phone: 832-849-4150
www.raesecurity.com

Seclock Distributors
Phone: 800-847-5625
Fax: 800-878-6400
www.seclock.com

Southern Lock and Supply Co.
Phone: 727-541-5536
Fax: 727-544-8278
www.southernlock.com

Stone & Berg Wholesale
Phone: 800-225-7405
Fax: 800-535-5625
www.stoneandberg.com

TimeMaster Inc.
Phone: 859-259-1878
Fax: 859-255-0298
www.time-master.com

Transponder Island
Phone: 440-835-1411
Fax: 216-252-5352
www.transponderisland.com

Turn 10 Wholesale
Phone: 800-848-9790
Fax: 800-391-4553
www.turnten.com

Wesco | Anixter
Phone: 844-522-5275
www.anixter.com/locksmith

UHS Hardware
Phone: 954-866-2300
www.uhs-hardware.com

U.S. Lock Corp.
Phone: 800-925-5000
Fax: 800-338-5625
www.uslock.com

MANUFACTURERS

ABUS KG
Phone: 492-335-634151
Fax: 233-563-4130
www.abus.com

ABUS USA
Phone: 623-516-9933
Fax: 623-516-9934
www.abus.com

ACS s.r.l.
Phone: 052-291-2013
Fax: 052-291-2014
www.acs.re.it

Allegion
Phone: 317-810-3230
Fax: 317-810-3989
www.allegion.com

Altronix
Phone: 718-567-8181
Fax: 718-567-9056
www.altronix.com

American Security Products
Phone: 800-421-6142
Fax: 909-685-9685
www.amsecusa.com

ASSA, Inc.
Phone: 800-235-7482
www.assalock.com

Advanced Diagnostics USA
Phone: 650-876-2020
www.adusa.us

Autel US Inc.
Phone: 855-288-3587
www.autel.com

Brilliant Guard
Phone: 630-229-4601
www.brilliantguard.com

Bullseye S.D. Locks LLC
Phone: 859-224-4898
Fax: 859-224-1199
www.bullseyesdlocks.com

Command Access Technologies
Phone: 888-622-2377
Fax: 888-622-2377
www.commandaccess.com

CompX Security Products
Phone: 864-297-6655
Fax: 864-297-9987
www.compx.com

DETEX Corporation
Phone: 800-729-3839
Fax: 800-653-3839
www.detex.com

Digipas Technologies, Inc.
Phone: 949-558-0160
Fax: 949-271-5701
www.egeetouch.com

Don-Jo Manufacturing, Inc.
Phone: 978-422-3377
Fax: 978-422-3467
www.don-jo.com

Door Closer Service Co.
Phone: 301-277-5030
Fax: 301-277-5080
www.doorcloser.com

Door Controls International
Phone: 800-742-3634
Fax: 800-742-0410
www.doorcontrols.com

dormakaba Best
Phone: 317-810-1000
www.dormakaba.com

FireKing Security Group
Phone: 800-342-3033
Fax: 708-371-3326
www.fireking.com

FJM Security Products
Phone: 800-654-1786
Fax: 206-350-1186
www.fjmsecurity.com

Framon Manufacturing Company Inc.
Phone: 989-354-5623
Fax: 989-354-4238
www.framon.com

Gardall Safe Corporation
Phone: 312-432-9115
Fax: 315-434-94228
www.gardall.com

General Lock
Phone: 858-974-5220
Fax: 858-974-5297
www.generallock.com

GKL Products Inc.
Phone: 916-686-0868
Fax: 916-686-0868
www.GKLProducts.com

Global Tecspro, Ltd.
Phone: +86-152-2033-2799
www.gtl.tw

Hollon Safe
Phone: 888-455-2337
Fax: 866-408-7303
www.hollonsafe.com

HPC/Hudson Lock
Phone: 800-323-3295
Fax: 978-562-9859
www.hudsonlock.com

IKEYLESS LLC.
Phone: 502-442-2380
www.ikeyless.com

International Key Supply
Phone: 631-433-3932
internationalkeysupply.com

J.C. Gury Signs and Decals
Phone: 714-738-6650
Fax: 714-738-6998
www.jcgury.com

Jet Hardware Mfg. Co.
Phone: 718-257-9600
Fax: 718-257-0973
www.jetkeys.com

JMA USA
Phone: 817-385-0515
Fax: 817-701-2365
www.jmausa.com

JWM HI-Tech Development Co., LTD
Phone: 862-483-3782790
Fax: 862-483-782780
www.lockmanage.com

KABA ILCO Corp.
Phone: 252-446-3321
Fax: 252-446-4702
www.kaba-ilco.com

KEY-BAK/West Coast Chain Mfg
Phone: 909-923-7800
Fax: 909-923-0024
www.keybak.com

Keyincode, LLC
Phone: 978-207-0269
https://keyincode.com

Keyline USA
Phone: 800-891-2118
Fax: 216-803-0202
www.bianchi1770usa.com

Klassy Keys
Phone: 888-844-5397
Fax: 806-610-6670
www.klassykeys.com

KSP-Killeen Security Products
Phone: 800-577-5397
Fax: 508-753-2183
www.iccore.com

LAB Security Systems
Phone: 800-243-8242
www.labpins.com

Locinox USA
Phone: 877-562-4669
www.locinoxusa.com

Lock Labs, Inc.
Phone: 855-562-5522
www.locklabs.com

Lock Net LLC
Phone: 800-887-4307
Fax: 877-887-4958
www.locknet.com

LockPicks.Com
Phone: 408-437-0505
Fax: 408-516-0505
www.lockpicks.com

Locksmith Services s.r.o.
Phone: 420-604-226550
www.locksmith.ca

Lucky Line Products, Inc.
Phone: 858-549-6699
Fax: 858-549-0949
www.luckyline.com

Master Lock Company LLC
Phone: 800-558-5528
Fax: 414-444-0322
www.masterlock.com

Medeco Security Locks
Phone: 540-380-5000
Fax: 540-380-1768
www.medeco.com

Mul-T-Lock USA
Phone: 800-562-3511
www.mul-t-lockusa.com

Nagasawa Manufacturing Co.
Phone: 814-936-3115X1
www.nagasawa-mfg.co.jp

NAPCO Security Technologies Inc.
Phone: 631-842-9400
Fax: 631-789-9292
www.napcosecurity.com

National Auto Lock Service Inc.
Phone: 650-875-0125
Fax: 650-875-0123
www.laserkey.com

Olympus Lock Inc.
Phone: 206-362-3290
Fax: 206-362-3569
www.olympus-lock.com

Pacific Lock Company
Phone: 888-562-5565
Fax: 661-294-3097
www.paclock.com

PDQ Manufacturing
Phone: 717-656-5355
Fax: 717-656-6892
www.pdqlocks.com

Philadelphia Hardware Group
Phone: 858-642-0450
Fax: 858-642-0454
www.philihardware.com

Premier Lock
Phone: 908-964-3427
Fax: 877-600-4747
www.griptighttools.com

RemoteLock Pro
Phone: 877-254-5625
www.remotelockpro.com

Sargent and Greenleaf, Inc.
Phone: 859-885-9411
Fax: 859-885-3063
www.sargentandgreenleaf.com

SECO-LARM USA INC.
Phone: 949-261-2999
Fax: 949-261-7326
www.seco-larm.com

SecuRam Systems, Inc.
Phone: 805-988-8088
www.securamsys.com

Secure-T-Agency (STA)
Phone: 514-963-3701
Fax: 514-447-1024
www.secure-t.ca

Securitech Group Inc.
Phone: 718-392-9000
Fax: 718-392-8944
www.securitech.com

Security Door Controls
Phone: 805-494-0622
Fax: 866-611-4784
www.sdcsecurity.com

Select Hinges
Phone: 269-910-1988
Fax: 269-323-3815
www.selecthinges.com

Stanley Security Solutions Inc.
Phone: 317-572-1934
Fax: 317-578-4909
www.stanleysecuritysolutions.com

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

Tecnoinsurrezza
Phone: 859-480-9918
www.usatecno.com

TopDon USA, Inc.
Phone: 833-629-4832
www.topdonusa.com

TownSteel, Inc..
Phone: 626-965-8917
www.townsteel.com

Vanderbilt Industries
Phone: 973-316-3900
Fax: 973-316-3999
www.vanderbiltindustries.com

Wilson Bohannan Company
Phone: 800-382-3639
www.padlocks.com

SERVICE ORGANIZATIONS

Advanced Digital Locksmiths Group
Phone: 877-237-6969
https://advdlg.com

ASSA Technical Services Inc.
Phone: 724-969-2595
www.assatechnicalservicesinc.com

Facilities IQ
Phone: 412-956-2900
www.myfacilitiesiq.com

KeyMe
Phone: 602-538-7052
www.key.me

KEYS INC.
Phone: 520-523-5203
Fax: 520-268-8878
www.keysapp.com

Versured
Phone: 877-322-2276
versured.com/locksmiths

Workiz Inc.
Phone: 855-790-7363
www.workiz.com

Education: A New Appreciation

By William M. Lynk, CML, CPS, ICML, CMIL, CAI, M.Ed.

When I was in high school a few years ago, there were core required subjects, but there were also electives from which I could choose. One class that I decided to take on a whim was "Art Appreciation." I knew absolutely nothing about visual art … but I thought I knew what I liked. My idea of fine art was a painting I admired known as "Dogs Playing Poker." The bottom line now is that I just didn't know what I didn't know.

However, the class taught me that "appreciation" was "understanding." For example, my teacher introduced us to the artist Georges Seurat, one of the Impressionist period's most famous artists who used the technique of Pointillism. You can see this in his best-known work, "A Sunday Afternoon on the Island of La Grande Jatte" (1884). I learned that Pointillism is a painting technique in which small, distinct dots of color are applied in patterns that when unified optically by the human eye are perceived to form images. The explanation not only fascinated me as a high school student, but it also helped me arrive at a realization. I eventually figured out that by knowing the historical issues of the time and the new techniques the artists were creating, I could also understand what went into these famous paintings. Thus, by understanding, I could appreciate. Had I not been taught this, I may have seen that painting in a museum and thought, "That's a nice picture" and walked on. Now, that understanding translated into appreciation and has given me a valuable tool in assessment. The same concept of appreciation can be aptly applied to locksmithing classes.

Better Understand Your Profession

I have heard many a locksmith over the decades claim, for example, that they do not need to take a class in safes because they do not do safe work in their area. That's like saying, "I don't need to take an art class because I have no artwork on my walls." As I also learned, ignorance simply means "not understanding

or knowing." Education can mitigate that negative in a good way.

We never know where our future paths will take us on our life's journey. Maybe you will get an abundance of safe work at some point. Perhaps your institutional job may change locations to where there are safes to be serviced, and they need you. Or your institution could acquire safes at some future time. There you are. The takeaway message is that it's prudent to be well-versed and knowledgeable on many aspects of locksmithing rather than being limited. Education can offer that. But you may be asking yourself, "Why should I spend eight hours in a class that could be expensive?" The reasons may surprise you.

The Best Around

ALOA offers the finest live classes in locksmith training, bar none. The instructors are highly qualified industry experts from across the country — and even internationally. ALOA is proud to have some of the best content experts available. Taking quality classes will not only offer you breadth and depth within a specific area of locksmithing, but it will add to your "appreciation" of that area. I would also be remiss not to point out that appreciation doesn't have to imply that you will like everything being expressed. But it does support a general understanding of a body of knowledge and its related skills.

The Benefits of Taking Classes

Higher Income. Specialized classes provide specialized knowledge and skills that support acquiring more and varied types of work. To that end, live classes expose you to the latest products and techniques, which can lead to an increased customer base, and eventually, higher income (more profit).

"ALOA offers the finest live classes in locksmith training, bar none."

Licensing/Continuing Education Requirements. Some states require locksmiths to take ConEd/CEUs (Continuing Education/CE Units) in the form of approved classes to maintain their state license. Why not do it in style in the most accurate, intense and comprehensive way through a sanctioned ALOA class?

Test Taking Advantages. For those who are on the pathway to certification, ALOA classes are designed to dovetail with the ALOA PRP (Proficiency Registration Program), allowing locksmiths to gain certifications that demonstrate knowledge and skills at varying levels (e.g., CRL, CPL, CML, etc.). Some employers require this type of certification advancement during their employment. At the very least, it will set you apart from those who have not done so.

Networking. One of the best ways to network with fellow locksmiths is by taking an eight-hour class. Friendships are quickly developed, mentors are found, and referrals are only a fingertip away. Just bouncing ideas off other locksmiths can save you tons of time and money. Get connected!

Increasing Qualifications. Your customers and employers will be more confident when you increase your expertise level. Classes can assist in garnering new designations, adding experience and achieving an augmented knowledge/skill base, all of which play into a higher level of professionalism. And why wouldn't you want that?

Hands-On/Live Instruction. The true excitement of a live class coupled with immediate feedback within a high-quality class is a fundamental asset of live ALOA instruction. Instructor follow-up after the class (and weeks later) is easy and helpful when needed. Also, ALOA members receive a discount when taking classes as a member benefit. So, you invest some money up front, but it can quickly be offset in savings received in return.

Enjoyment and Personal Growth. We certainly cannot forget the plain enjoyment of experiencing a room filled with other like-minded locksmiths, all thirsting for information. A class can be challenging, as it may push your comfort zone a bit, but a rewarding experience is what you will get.

That all being said, why not enroll in a Safe Appreciation class to add a new skill? Take an Interchangeable Core Appreciation class to increase your profits. Or sign up for an Automotive Appreciation class just for the fun of the ride. Regardless, the love of learning is always a great reason by itself. So, go ahead and just do it. I'm sure you'll appreciate it.

William M. Lynk, CML, CPS, ICML, CMIL, CAI, M.Ed., has been a locksmith since 1975 and is the owner of www.ICLSglobal.com. Bill is an IC specialist, an industry author, the subject matter expert on IC for ALOA, and an ALOA ACE instructor, teaching classes on interchangeable cores and master keying across the country. He has originated SFIC Technical Manuals for both national and international lock manufacturers, and maintains a working relationship with the major lock and security manufacturers throughout the world. In 2013, he was named Keynotes Author of the Year.

MOBILE LOCKSMITH BUSINESS FOR SALE

Mobile Locksmith Business For Sale. 30 year + turn key business, Owners retiring! $300 K tools equipment, & inventory.2015 & 16 Nissan NV2500 lettered & fully equipped. serious inquiries only! Located in beautiful & booming Naples Fl. Its time to move out of your dirty & lawless city and enjoy the good life! Long time and respected Larocco Locksmiths, currently servicing commercial, residential, automotive & safe serv. New owner will need at least 4 experienced locksmith techs to keep the business moving smoothly! Annual gross sales is $400 K + with no advertising. We have worked continually for 95% of all of Naples new & used car dealers for the past 27 years! We service 4 very large hospitals in Naples exclusively! and countless commercial & residential customers. We have worked for the city of Naples & the Naples police dept. for the past 20 years exclusively! We are the first contacted locksmith for American Security, Bass security, Rolland Safe & Aloha Lock for the past 20 years. Business sale is $700 K and will consider 300 K down and will be willing to finance balance if necessary, at a low interest rate. I will work with new owner if necessary for one year. Serious inquires only, New owner will need to qualify for this sale as I owe it to our many loyal customers!!! 239-434-5397 Jim <05/23>

BUSINESS FOR SALE

Owner retiring. 35-year-old business located in So. MN. Includes van and all equipment and inventory. For more info, call 507-387-1373. Alan. <05/23>

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 nonmembers. All ads must be submitted in a word document format and emails 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.

Advertiser	Ad Location	Website	Phone Number
ASSA-Ruko/Technical Services	page 17	www.assatechnicalservicesinc.com	(724) 969-2595
Autel	pages 12, 13	www.autel.com	(855) 288-3587
Big Red	page 17	www.bigredsafelocks.com	(877) 423-8073
Bullseye S.D. Locks	page 17	www.bullseyesdlocks.com	(800) 364-4899
ClearStar Security Network	page 61	www.clearstar.com	(360) 379-2494
Framon	page 3	www.framon.com	(989) 354-5623
Hollon Safe	page 51	www.hollonsafe.com	(888) 455-2337
ICOR Products	page 54	www.BESTLocksDepot.com	
Locinox	page 36	www.locinoxusa.com	
Lock Caddy	page 37	www.lockcaddy.com	(708) 246-6769
Seclock	inside front cover, page 17	www.seclock.com	(800) 847-5625
Stone & Berg	page 53	www.stoneandberg.com	(508) 753-3551
Turn 10 Wholesale	inside front cover	www.turnten.com	(800) 848-9790

ALOA 2023

Hot Times, Cool Vibes

Hilton Orlando

ORLANDO, FLORIDA

Classes
AUGUST 6–10, 2023

Security Expo
AUGUST 11–12, 2023