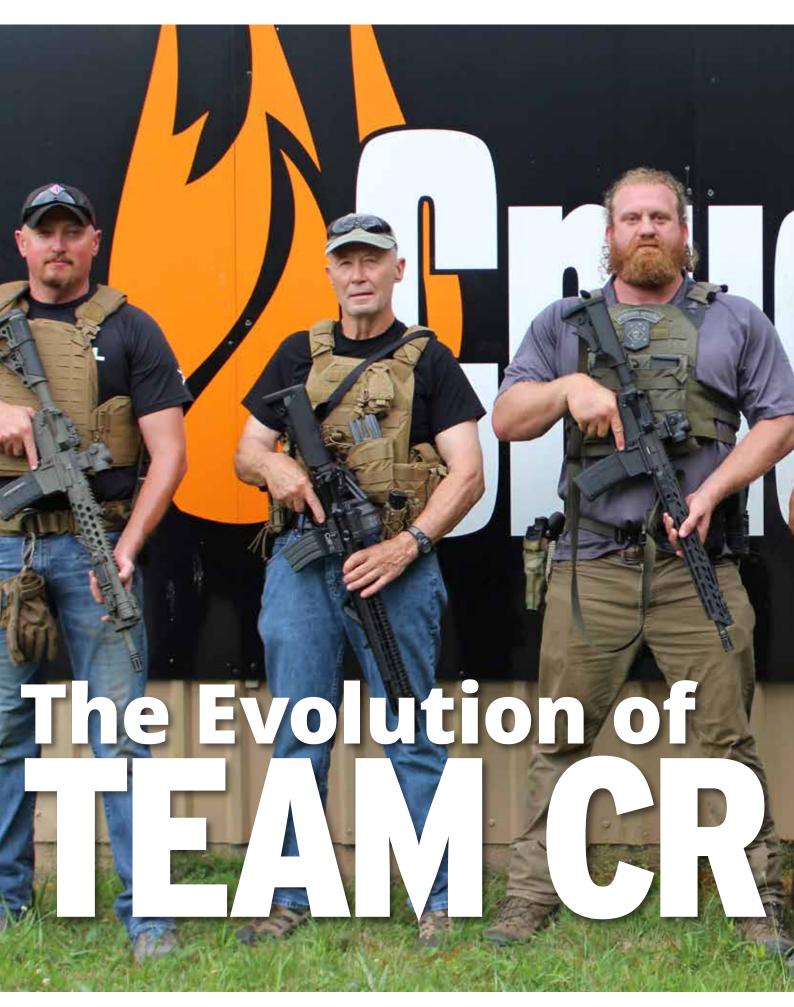
SMALL ARMS DEFENSE JOURNAL

NO GOMPROMSE THE NEW EXCELITAS DRAGON THERMAL SIGHT

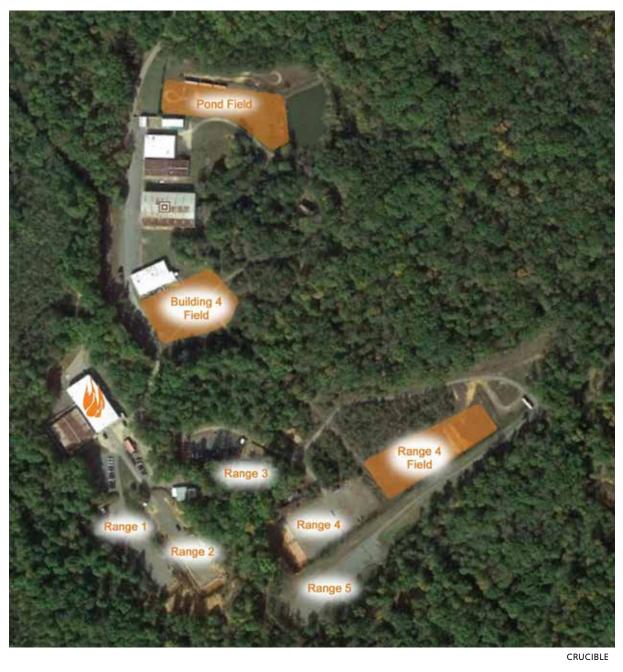
PETIT BUT POTENT SIG SAUER'S M400 SWITCHBLADE AR PISTOL **OWN THE NIGHT** NIGHT VISION AND THERMAL IMAGING SIGHTS

VOL 14, NO 3 | MAY/JUNE 2022





The Crucible's necessarily secluded location in rural Stafford County Virginia has long proven attractive to certain clients, particularly among the many throughout the greater Washington D.C. area. By leveraging Crucible's wide array of training capabilities, clients can ensure their personnel are fully trained and/or formally qualified with little travel time or costs.



Tactical Training and More...

The Crucible, formed in 1993, is a specialized, high-risk environment (HRE) training company, providing instruction to the United States Government, Department of Defense, other Government agencies (OGAs), and multi-national corporations. Located just 60 miles from our Nation's capital, Crucible's training facilities provide classrooms, firearms ranges, high speed 2.1 mile track, unimproved roadways, off road trails, matted combatives training area and scenario sites that replicate real world environments for people operating in austere locations worldwide. We have earned our credentials as global providers of operational services and training with over 25 years of continuous, successful business in more than 50 countries. Our formally trained and internationally experienced instructors bring a deep knowledge base to Crucible's training and security management system. We bring our clients training from the operational field and services with silent confidence. (**Team-Crucible.com**)



John Buchanan, USMC combat veteran and longtime instructor at Crucible, conducting dry runs for students in the live fire shoothouse.

Crucible, Radio Recon and now there's Tier Craft

Nearly 30 years since its modest beginning that was quickly followed by rapid growth in discreetly serving a specialized range of clients, Team Crucible is further expanding operations.

Radio Reconnaissance Technologies, Crucible's parent company, has formed Tier Craft Inc. as a holding company, providing a streamlined structure as both companies look towards significant growth in 2022 and beyond.

Nick Hoben, President of RRT and leader of Tier Craft, says the new organization "will guide the growth and teaming power of the two long established companies. Formerly organized as parent – RRT, and subsidiary – Crucible, the two companies will operate completely independent of each other while maintaining the ability to support each other operationally."

Official contracting channels will stay at Crucible and RRT, but Tier Craft will step in to assist in growing client base and services.

"Four legs to the table" Lean but not mean

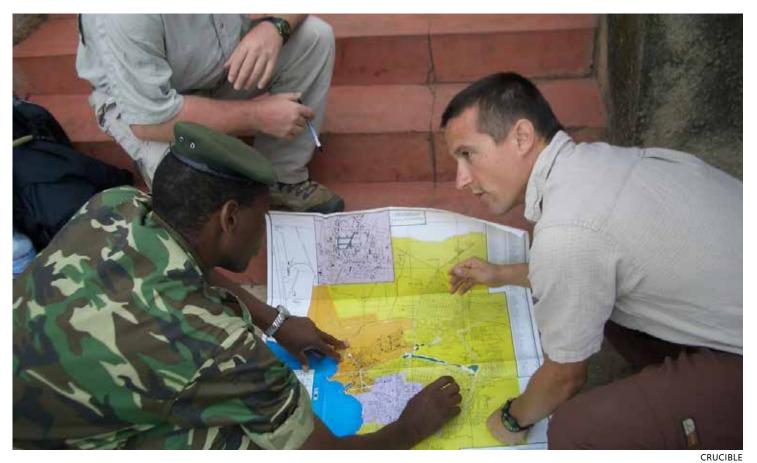
The Crucible's primary staff is remarkable in many ways, not the least of which because it has long been just four full timers; "four legs to the table." It works, we're told, because they all pitch right in to do everything necessary, from cleaning toilets to training elite members of the military. Efficiency and effectiveness come from drawing on a roster of dozens of highly skilled and specialized part time adjunct tactical instructors whenever needed to prepare and serve up all items on the company's extensive menu.

Our main interviews were with two key individuals: John Garman, who has been with Crucible almost from the very beginning; and Jack Davis, the most recent addition, who will be taking the company forward with new capabilities and offerings.

Also, quietly observing the interviews, were Principal Instructors and all-around problem solvers John Buchanan and Ben Klinefelter. Both men are seasoned USMC combat veterans with years of rough, real wartime experience and highly specialized training courses in the Corps. Various defense and security postings followed including overseas-deployed contract operators. Coming to Team Crucible first as adjunct tactical instructors, then selected for coveted full-time positions, they've brought an astonishing array of critical skills to enhance and round out the curriculum.

Garman and Davis

John Garman, a lean, steel spring wiry and deceptively young looking 50-year-old, describes himself as Crucible's only non-military principal staffer. "I'm not DoD," he said, "I'm OJT," starting in 1994 as a combatives instructor, training personal security teams. While literally "hands on" at the time, this internationally recognized martial arts master's keen intellect combined with organizational and administrative skills led him thru



_04. Seen during a previous deployment to Africa, Crucible's John Garman confers with a local commander in planning the primary route for a VIP convoy through potentially hostile urban areas.

serial changes in company ownership to become president of the company in 2015. Along the way, he deployed in various capacities to Afghanistan, Iraq, Uganda, Burundi, Bosnia, Brazil, Russia, Indonesia, and more. In January 2022, Garman made a lateral move to Tier Craft, the new holding company, concentrating on business development and corporate growth.

Jack Davis, a red bearded, 36-year-old, smiling grizzly bear of a man is now Crucible's director. He enlisted in the Marines in 2004 and following combat tours as an infantryman, was selected for the Corps' Martial Arts Center of Excellence where he earned a fourth degree black belt instructor trainer title. In 2009 he joined the elite Raider brotherhood of Marine Corps Special Operations Command. But after ten intense years of combat deployments as a MARSOC operator, "I was bruised, battered and beat up," he said, "it was time for me to stop being operational and enhance the next generation of war fighter. Still having a heavy desire and feeling the obligation to ensure safety and



CRUCIBLE

Pausing for a moment on one of the facility's ranges, Jack Davis, director of Crucible, strives to maintain weapons proficiency that was honed to a razor edge from years as a MARSOC operator. Davis explained his mission at Crucible is to "develop and improve our curriculum based on the ever-changing global threats, and provide training necessary to increase the survivability of those going into harm's way." well-being of all my brothers and sisters in arms, I joined the Crucible team in 2019."

Quiet Professionals

Garman: We are open to provide our services to everybody. I had a member from the DEA say, 'We didn't know the DEA was allowed here, we thought it was only the snake eaters.' People need to know The Crucible is here to provide our services to everybody who needs it.

A lot of people don't realize that because we don't use Facebook much and because we don't advertise that it means 'stay away.' That only means when you come here nobody has to know. That's really the difference. We could put up all the cool images of everybody we've trained – 'Great class today with Acme Corp.' But we don't do selfies. The 'quiet professional' is in our DNA.

The Crucible Method

Our first order of business was to go over the company's well-established mission set that has distinguished it over many years. The four main disciplines being combatives,



CRUCIBLE

Instructor John Buchanan closely monitors students in a tactical weapons training exercise utilizing proper carry and employment techniques for carbine and pistol while static and moving to engage multiple targets at various distances. Courses can be tailored to cover basic to advanced techniques and tactics depending on mission requirements, student proficiency levels, and training objectives.



A training scenario to realistically simulate battlefield wounds and critical triage in the tactical field care stage of a live fire scenario. Having fought off the enemy, there is now sufficient time and cover for a thorough patient assessment and care.

small arms weapons and tactics, tactical combat casualty care, and driving.

SADJ: Explain Cruicible's focus on this training for domestic law enforcement as well as for U.S. military, corporate personnel and contractors who will be traveling overseas.

Garman: While we teach weapons and tactics, where we shine is in the way we teach students to incorporate each



CRUCIBLE

The Vehicle Tactics course involves shooting into, around, through, and out of a vehicle utilizing good tactics and use of cover while understanding ballistic and defensive properties of metal and glass. The highly realistic targets are from TAT-3D. This shooter is dressed in plain clothes, running the course in a carrying concealed which mimics an EDC citizen here in the U.S. or a special operations team member working overseas.

of the skills, combining medical and weapons, driving and shooting, driving and medical, fighting in vehicles, etc. That is the most salient thing in the Crucible method. You don't just get to be in a silo and teach people to shoot well. People don't get to go downrange to be a good marksman, they go downrange to come home to their families.

Combative handgun is a product we offer here, recog-

Thorough preparation for live fire and other training takes place in Crucible's well-lit and comfortable classrooms. In this case, adjunct instructors get a refresher before assisting with concealed handgun courses.



CRUCIBLE



CRUCIBLE

A representation of some of the organizations and nations that have long used the wide range of services offered by the Crucible and Radio Reconnaissance Technologies partnership.

nizing our students have to perform several different tactics from what they learned here when they're overseas. So when they go overseas and have to drive a rental car and somebody jumps into it with 'em. At that point they had to have been a good driver to get to where they are, now they've got to be a good combatant.

SADJ: So shooters and drivers learn medical too?

Garman: Absolutely. In a course coming up in January we're driving on day one and two, medical day three, weapons day four and five. On the range, the students will have an attack cue with live weapons, move in depth, use barricades, we'll tap one of the students down. The rest of the team has to fire and maneuver and remember care under fire. Sometimes good tactics is bad medicine.

SADJ: Tell us about those very realistic humanoid target dummies out there by the Combatives mats.



ROBBIE THAYER, TSS

Unmanned aircraft systems (UAS) are of particular interest to DoD's Rapid Reaction Technologies Office. This is the new military-grade VESPER Next Generation Elite Small Drone Vantage Robots, a participant in the 2021 NCRE at Crucible.

Garman: Three dimensional targets are important to our close confrontational shooting course. We can all shoot a silhouette in front of us but the way we approach is the reality of the life the student has. We've got 3D targets with arms that can extend with threat cues in their hand or their hands hidden behind them. 3D targets you can grab onto, pull in and shoot a live pistol or with Simunition weapons and SecuriBlank weapons and ammunition. The Simunition weapons cycle and eject with no unburnt propellent or ejected particles.

SADJ: Some students won't be able to do it right. How do you deal with this?

Garman: We're asked to improve the clients who show up – not be a source of attrition, but a source of improvement. You're going to get eight hours of training. If we can



RADIO RECONNAISSANCE TECHNOLOGIES

ThiEF, from Radio Reconnaissance Technologies, is a miniature, man-portable, fully integrated signal intercept and directional line of a bearing system designed to prosecute VHF and UHF analog, single-channel, push-to-talk radio transmitters. The system utilizes proven direction-finding techniques incorporated into modern technology to reduce size, weight, and power while increasing performance parameters.



An aerial drone captured this overhead view of one of Crucible's ranges set up for a recent USPSA (United States Practical Shooting Assn.) competition. Expanding into open enrolment programs, the company has begun teaching techniques for improving performance in this demanding, fast paced shooting sport.

help a student realize deficiencies and develop capacities you can then take that knowledge to your mission and apply it as you see fit. You show up at level X and you leave at level X plus. That's our goal.

SADJ: Report cards?

Garman: It depends on what the client asks for. Sometimes we can provide simple feedback like go/no go. Sometimes we build an evaluation metric for the client: 1 – does not meet the standard; through 5 – good as an instructor.

SADJ: What are some of the biggest challenges in your job? Biggest rewards ?

Garman: Every day is a challenge. We are a problem-solving company. We look for the hard things to do. The company has been so successful because, typically, people come to

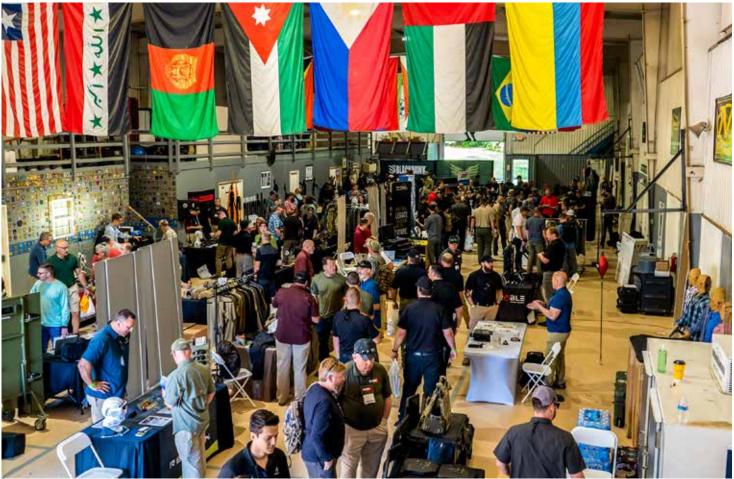
ROBERT BRUCE

The extensive SimIS product lineup which includes military-grade training robots, de-escalation robotics, and autonomous water vessels. On the left is their eerie, screen-faced Autonomous De-Escalation Robotic Trainer posed next to the self-propelled, programmable Human Type Target.

us when they're getting into something they're unaware of. Like a Tier 1 operator with new METL [mission essential task list] or enabler that doesn't normally go to high-risk environments. Everybody showing up has a problem that needs to get solved and that's why we're here.

We've heard from hundreds and hundreds of people who said 'I got into a sticky situation, and I immediately remembered being in classroom 2 where I learned what helped me survive the situation. Easily the most rewarding.

Davis: Challenges – Understanding the dynamics of each organization. One day you're teaching members of military who have plenty of experience handling firearms and the next day you're with someone who has never held a firearm. Rewards – To see some of these men and women return from hostile foreign country to say,



ROBBIE THAYER, TSS

Crucible's versatile facilities proved a perfect fit for TSSi's National Capitol Region Expo in 2021. While the numerous outdoor exhibits and live fire ranges saw constant action, crowds of attendees circulated among the dozens of exhibit tables in cavernous Building 5. The Expo returns to Crucible on June 16, 2022.

'you saved my life.' This is a motivator to continue our growth to ensure we stay sharp on TTP's [tactics, techniques, procedures].

Clients

SADJ: Note some organizations hosted and what recent training or other activities.

Garman: SAM.gov [System for Award Management] is an official website of the U.S. Government procurement opportunities. It shows Crucible's training for Army, Navy, Marine Corps, work for Tier 1 SPECOPS (top level Special Operations) units and for their enabling units. We also do work for some large corporations with government contracts supporting war effort across the world.

More often than not they're hiring former military and government folks to go overseas to do jobs similar to when they were in. They'll come here to get weapons qual so they can go downrange and carry guns and do TCCC (tactical combat casualty care). Others may come for a 'rebluing' [refresher] of a 5-day pre-deployment training package getting two days driving, two days weapons, and a day of medical so the team now has learned and can codify some of their TTPs before going downrange.

The other thing we're really focusing on is being a range resource for different entities. Like we discussed about the Department of Defense coming, we're trying to get more



CRUCIBLE

Performing live fire runs in Crucible's shoot house, a tactical team of CQB students has moved through multiple rooms, finding and engaging a series of highly realistic friend-or-foe 3D targets.

of the regional Department of Justice [entities] to come here. To let them know we're available for their kind of organic in-house range resource. So, their instructors come down, with their guns and everything else, to just use our ranges to accomplish their mission.

SADJ: Any agencies like CIA training here?

Garman: No agency likes us to talk about specifics but of

course we do work with many different government agencies.

Research, Development, Test & Evaluation Support

SADJ: Crucible does more than live range operations? Garman: We're problem solvers – able to team with government and industry to avail this great facility to their emerging technologies and connect them with potential users. Whether it's an autonomous vehicle that's a IED disruptor, a UAS drone, or other, they can come here T&E in a short iteration time.

We have done a good bit of work in the research field with ONR [Office of Naval Research] and ARL [Applied Research Lab] and also in the sales industry – working with leaders in the manufacturing industry to research and develop products.

ARL connects emerging technologies for the DoD's Rapid Reaction Technologies Office. They came to us in 2020 to host a demonstration event revolving around the CBRNE [chemical, biological, radiological, nuclear, explosive] world. We were able to work with their professionals and figure out how to hold the event. They returned in fall 2021 for an Unmanned Aircraft Systems demonstration.

Our partner company, Radio Reconnaissance Technologies, is working to place their ThiEF product, a signal intercept and directional line of bearing system, as a program of record with the DoD. We want to have these types of industry reps come in and demonstrate technologies for the government.

Davis: These efforts are what we are calling Crucible's 'Training Center of Excellence'. We can be a resource for emerging technology or product development. This location being close to the beltway and having great latitude and creativity of the staff provides a great environment for developing the next great advancement in training and solutions for the warfighter.

SADJ: With Aberdeen Proving Ground, Quantico, AP Hill, and other big bases, why would the military and government contractors come to Crucible?

Garman: Our professionalism and response capability is extremely sought after by folks that have access to all of those facilities. I've heard 'Hey John, I've scheduled my third exercise with U.S. installation X and I got bumped again. I've had engineers fly in, there's stuff in storage, all these things planned out and I still haven't accomplished my mission.' I'll say, 'How about Tuesday?'

SADJ: But then the contracting people have to get involved. Put it out for bids?

Garman: We are registered in the System for Award Management that enables us to propose and write prime contracts with the government but it's not always necessary. Some agencies are able to use their IMPAC purchase card and make it happen. So, your three-million-dollar research project got stalled for six months due to government range availability? With your IMPAC card your bottleneck just got opened up here at the Crucible.

Another example is a DoD organization that says, 'we have a pipeline of folks who have to qualify and go downrange.' They write a contract with Crucible for 30 days a year, then they know all it takes is a phone call to shoot and deploy.

Openings for Individual Students

Davis: The Crucible has decided to expand our training to civilians. The safest and most efficient manner we believe



CRUCIBLE

An adjunct instructor demonstrates thorough inspection of potential wounds by cutting away a role-playing patient's clothing. After initial assessment and stopping any major bleeding, the patient is assessed again for any additional wounds that are not immediately obvious. These critical skills will be an important part of a follow-on live fire tactical team exercise.



CRUCIBL

This view through the windshield on Dominion Raceway's highspeed track is overlaid with images from the Track Addict Pro smartphone app, used to help teach students when driving at emergency speeds. Measuring time, when and how hard each pedal is used, G-forces through the turn, speeds in each section or corner, it gives real-time information to improve the student's performance.



Pyrotechnics along with role-playing adversaries characterize Crucible's realistic anti-terrorist driving training off-site at Dominion Raceway. The ongoing arrangement with this versatile motorsports venue allows a full range of challenges including high speed driving, attack mitigation, convoy operations, and close defensive driving. Other offerings back at Crucible's main site include driving on gravel and dirt, as well as technical off roading.



CRUCIBLE

Thick hitting pads absorb impact shock as combatives students give it their best in the big open bay of Crucible's Building 5 learning center. Training options include edged weapons, club and expandable baton, multiple assailants, confined space, vehicle combatives, and abduction escape.



CRUCIBLE

Crucible is the first private corporation to have its instructors certified by the U.S. Department of State, Diplomatic Security Training Center, as protective security operations instructors. A key element of Crucible's Worldwide Personal Protection Services course for the Department of the State is this practical exercise in loading and unloading of personal protection details and some of the formations used to protect the motorcade and the protectee.

was to have one range dedicated to weapons handling and marksmanship, while the other has stages of fire using USPSA [United States Practical Shooting Association] rules and regulations.

SADJ: Is this something individuals can sign up for?



CRUCIBLE

In what has become known as low visibility training, Crucible teaches clients how to blend in with their environment, present less value to a would-be attacker, avoid confrontation, and in the event of an attack, how to swiftly mitigate the attack and move off of the attack site.



Crucible instructors traveled to Mississippi to conduct foreign weapons training for an Army National Guard unit preparing for overseas deployment. Hands-on weapons instruction included AK-47, RPD, RPK, and PKM.



U.S ARMY SPC. RYAN GREEN

Pulling security watch in 2013 at the U.S. Consulate in Herat province, Afghanistan. Crucible's Security Management services prepare personnel and facilities for a full spectrum of challenges.



Gear and weapons in Crucible's armory await the right men and women who can qualify as adjunct (part time) instructors, a necessary entry level to the team. Hiring takes place year-round as current personnel deploy and the demand for a wide range of highly specialized trainers intensifies.

SCOTT PRESLEY FOR CRUCIBLE

Joining The Crucible Team

Since our inception, Crucible has employed only the most competent, operationally experienced military, law enforcement, and security professional veterans to instruct, consult, and manage operations globally. We continually update our pool of available professionals and their individual specialties. Crucible is recruiting for Adjunct Tactical Instructors for "as needed" instructor positions at our Fredericksburg, VA facility. Specific experience is required in teaching one or all of the four foundational disciplines (small arms tactics, tactical medicine, driving, and individual protective measures). Cruciblejobs@team-crucible.com

Davis: As our operations tempo increases in 2022 we will lean heavily on individual contractors to assist and would like to continue grow that pool of highly trained special operators.

Garman: Our people are the company's biggest asset. We hire folks that come from a high threat operational background that also have formal instructional experience. While we primarily look for folks from the Special Operations community, we also have some that were not in SPECOPS but excel as instructors and problem solvers. Regardless of where our staff comes from, they all have an exceptional ability to get the most out our clients to prepare them to prevail in the harshest of climates.

The best way into the company is to be used as an adjunct on a daily or intermittent basis, then as you learn of the company and the company learns about you – strengths and weaknesses – we move forward and then as jobs present, overseas job or higher-level effort here in the building, we pull from that pool of people because they're known entities.



CRUCIBLE

Personal security detail (PSD) training includes all aspects of providing close protection in high threat environments. Instructors relate formal training with operational experiences that prepare the PSD team member for success in the most severe situations.

Garman: On Facebook look up 'Crucible Crucible.' Jack Davis is running point on that.

SADJ: Any other classes that individuals can take?

Garman: We're moving into that space now.

SADJ: What additions, upgrades/improvements are planned for the near future?

Garman: Our most immediate upgrades are what we're doing in medical training, to provide a combination of domestic stateside first aid with tactical combat casualty care.

TCCC is for that non-medical provider to treat life threatening wounds and get you back to higher echelon care. It doesn't really deal with non-kinetic issues like cardiovascular incidents, heat exhaustion, diabetes. We're meshing that training so the tactical professional will get the full spectrum of professional responder training.

SADJ: Upgrading targeting capability on the ranges? Moving robots?

Garman: Absolutely. We've been working with SimIS for almost a year with their moving, pre-programmable or randomized, three-dimensional targets that get knocked back and measure the hits. A perfect example of how the Crucible can help bring these good products to the industry.

Another big one we've been working very close for about two years – see this on our 'Crucible Crucible' Facebook



U.S ARMY SPC. RYAN GREEN

Bullet holes, blown out windows and RPG damage to the U.S. Consulate Herat in the aftermath of a surprise attack in 2013 by insurgent forces in Afghanistan. A comprehensive security survey by Crucible's analysts is key to prevent this from happening to your overseas operation.

page – is Scoring Technologies and PracticeScore for USPSA and IPSC. We're helping to provide data for their acoustic and non-acoustic shot timers that include artificial intelligence. Measure your shot times and go up to the target, take a picture and the computer is able to score your target.

The owners of Crucible know how to grow a company, that investment is required, but they are smart about how they spend their money. We're a commercial enterprise, a positive profit and loss is obviously one of the goals. Our mission statement is 'Provide Best of industry training to exceed client demands and company goals.' We can outfit a range with the highest tech you need but we have to manage that cart before the horse.

What's Next?

The "wiring diagram" for Radio Reconnaissance Technologies, and The Crucible shows the two aligned straight across with Tier Craft sitting above as an umbrella organization. As previously noted, Nick Hoben, heading up the Tier Craft holding company, says RRT and Crucible "will operate completely independent of each other while maintaining the ability to support each other operationally."

While investment advertising often cautions; "past performance does not necessarily predict future results," the unbroken track record of success for Crucible and RRT bodes well for the future in their new structure.

Contacts

While RRT and Crucible will maintain their current office locations and capabilities, Tier Craft will support a management team that will aggressively promote the

Radio Reconnaissance Technologies, Inc.

3328 Bourbon Street Fredericksburg, VA 22408 540-752-7448 **radiorecon.com** two companies as they position themselves for new partnerships and teaming arrangements with an eye towards growth for both entities.

Team – Crucible, LLC

60 Jack Ellington Road Fredericksburg, VA 22406 540-752-2800 **team-crucible.com**