On the Hip of the Spear

S.O. Tech makes cutting-edge tactical gear for real-world cops and soldiers.

By Richard Ryan ★ Photos by Ichiro Nagata

Standing in the factory today, among the rows of sewing operators producing tactical thigh holsters, assault vests, magazine pouches, and medic bags, an outsider would have to stretch his imagination to visualize the tiny room. It was in the tiny room containing a lone industrial sewing machine, a few shelves, and a bed where, 13 years ago, Jim Cragg began S.O. Tech.

Perhaps the origins of Special Operations Technologies, S.O. Tech's formal name, go back further, to when Jim was a little boy and dreamed of being a soldier. He fulfilled that early ambition, attended West Point twice (medically discharged both times for bad knees earned in a parachute jump) and still went on to serve as an Army officer in SOF.

Today, the tiny room is a bustling factory staffed by dozens of American workers in a suburb of Los Angeles. A bit off the commercial radar, S.O. Tech is well known by this country’s elite, front-line warriors fighting against enemies, both international and domestic. S.O. Tech has become one of the premier tactical gear manufacturers in the world.

One of the first ingredients that led to Jim’s success is his unabashed patriotism. Jim still serves as a major in the United States Army and is a veteran of Afghanistan. His staff primarily includes a diverse group of former military men and veterans: pilots, parachutists, divers, SEALs, infantrymen, even some certified parachute riggers who bring their extensive field knowledge of load bearing and carriage to the S.O. Tech Custom Shop.

Another ingredient to Jim’s success can be found in the old real estate adage, location, location, location. By pure luck, Cragg chose to make his gear-sewing hobby into a business in the City of Angels. S.O. Tech is strategically located near the old Garment District’s abundant skilled labor pool of sewers and seamstresses, with plenty of industrial machinery available and...
the widest array of raw material resources.

As his orders overflowed, the Garment District later afforded Cragg the use of six nearby sewing subcontractors in order to meet crucial delivery time requirements. In turn, this helped S.O. Tech develop a business model that could react quickly with new designs that would expand to meet large demands.

Coincidentally, the L.A. area is home to a hotbed of tactical gear development. In fact, the southern part of the Granola State is home to the Los Angeles Police Department, the Los Angeles Sheriff’s Department, and over 120 other police agencies, and it has a strong state and federal law enforcement presence as well.

Sunny L.A.’s overabundance of bottom-feeding lawyers pressure law enforcement agencies to stay one step ahead in the liability game by being on the cutting edge of development. An example is the Ambidextrous Taser holster, a device S.O. Tech built as a quick-disconnect holster that gained worldwide use. Southern California is also home to the Army, at Fort Irwin; the Marines, at Camp Pendleton; and the SEALs, in San Diego, all fertile fields ripe with ideas and warriors looking for, and willing to test, good tactical gear.

A Shady Start

Cragg is often caught reminiscing with some of his original employees about his first small factory. S.O. Tech started in a seedy area of downtown L.A. They laugh, remembering the hookers arguing about side-
walk turf rights outside their barred windows.

A couple of DEA customers pointed out that a block east of S.O. Tech was where the highest concentration of crack dealing was located. But that grungy factory represented another critical key that led to S.O. Tech’s success—loyalty in the form of good friends.

The owner of that original factory, Dave Thomas, one of Cragg’s old Special Forces buddies, gave a growing S.O. Tech some extra factory space free of rent.

Fortune Favors the Bold

Necessity is the mother of invention. The infamous 1997 Bank of America shootout, in North Hollywood, was the first tremor on the tactical Richter scale. Hordes of LAPD officers came in to buy S.O. Tech’s quick-clip Patrolman’s Ammo Thigh Rig. In 1999, it was another tremor for S.O. Tech when the LAPD prepared for the Democratic National Convention riots.

Soon after, a bigger aftershock hit when the clip-on thigh rig was adapted to mount the ambidextrous Taser holster and bulk orders came in from police agencies around the world.

After 9/11, the special operations small units that S.O. Tech supported in peacetime became very visible—as did S.O. Tech rigs—on the tip of the spear during the “shock and awe” shooting war. S.O. Tech outfitted small SOF units in Afghanistan up to entire divisions, like the
82nd and 101st Airborne units, in Iraq.

S.O. Tech’s medical rigs and bags became hot items. S.O. Tech is the official supplier of the Individual First Aid Kit (IFAK) to the Army’s Special Forces.

Almost overnight, “battlefield proven” became the hallmark of S.O. Tech’s products, which have been tested and proven to survive in some of the world’s worst conditions. They are constantly improved, with input from the world’s most elite operators.

As a result, S.O. Tech continued to grow and moved for a third time into their vastly expanded factory. They have even expanded into a second building, to double the size of their production floor, and have added employees and a night shift as well as in-house graphic design with embroidery, silk screening, and printing capabilities. Today they number 350 employees.

**Leading Edge**

Innovation has been an anchor of S.O. Tech’s business model. Jim has an uncanny eye as a jack-of-all-trades tactical specialist, be it for assaulters, snipers, medics, breachers, and EOD experts. Cragg holds seven patents with six more pending.

A good example of Jim’s innovation is his “Symbolology” set of patches to affix to S.O. Tech’s Mission Packs to denote the mission panels contained within. Symbolology is based on military map symbols to denote every police or military operator on the tactical level. The line is so successful that S.O. Tech has created Symbolology in cloth patches, T-shirts, ball caps, lithographs, IR patches, map magnets, and digital software.

Above: The original BLoCS vest demonstrating some variety of pouch options in the S.O. Tech line. This one is a Callahan plate carrier with a holster insert, grenade pouches and mag shingle.

Below: Elements of the BLoCS vest maintain the lowest profile by design.

An ingenious take on the oft-seen dump pouch, the S.O. Tech version is angled such that spent magazines neatly stack by gravity and a bit of shake from walking.
S.O. Tech is best known for its Go Bag that comes in several sizes, configurations and colors. The design was originally made to fit between the seats of a 160th SOAR “Little Bird,” but so many people started using them in vehicle operations and as covert M4 carrier that the Go Bag has taken on a life of its own. Below: One pouch, three missions: two frag grenades, a smoke canister or double M4 mags.

Flat against the body. This affords a low profile while leaving PALS webbing across the front of the vest for attaching medical pouches or other gear pouches.

The “internal magazine” design, which is patent pending, later became a successful base for his Calahan Plate Carrier and would also be adopted for the entire 325th Parachute Infantry Regiment’s Falcon Brigade, of the 82nd Airborne Division, as the Falcon Harness.

On a side note, one of Cragg’s favorite stories is that of a lucky paratrooper fortunately wearing Jim’s low-profile plate carrier. A rocket propelled grenade ricocheted across his chest, burning the face of his low-profile S.O. Tech rig. Had the soldier been wearing a traditional vest with bulging mag pouches, they wouldn’t be laughing about the outcome.

Another S.O. Tech innovation is the Flex-Tab attachment system, also patent pending. Looking at the MOLLE strap and trying to find something less destructible than a snap or plastic click-on strip, Jim came up with a folded and sewn cloth hook. During wind-tunnel testing, the tester accidentally cranked the blower to 750 knots (650 is normal), which shredded the equipment on the mannequin, but the Flex Tab held strong!

So Others May Live

VIPER, which stands for Veterans Industry Program for Educational Rehabilitation, is a program in which S.O. Tech has partnered with the Veterans Administration to provide job training to local veterans. Cragg approached the local VA hospital and established a sewing factory on the grounds to provide vocational rehabilitation training. Both injured and non-injured veterans are offered a wide variety of job training in this program. The veterans who assemble the military medical kits and sew packs feel like they are “back on the team.” Purchases provide support to this charity project and support our nation’s heroes.

Cragg runs S.O. Tech like his former military units, and he believes in fighting for what he believes is right. It costs him tens of thousands of dollars in tooling, prototyping, testing, and product development to produce a design. It costs his rivals the price of one S.O. Tech product to rip it off. He believes so strongly that proprietary ideas should be protected that he is invested in a multimillion-dollar lawsuit to protect his inventions.

After watching the flow of knock-offs coming in from abroad, Cragg decided to fight fire with fire—he knocked himself off. After faithfully sewing all products in America, Cragg created a second company, Paladin Designs, to bring S.O. Tech’s licensed designs to market at a competitive price by manufacturing overseas. Paladin Designs are mainly for those who want S.O. Tech designs but do not require American workmanship and durability.

All S.O. Tech products are still made in America, but for those with a fixed budget, Jim’s Paladin versions are the same but with the lower labor costs from Asia.

Surviving the World’s Worst

Brandon Scott, a Ranger medic, posed S.O. Tech with the dilemma of combining magazine pouches with medical pouches on a platform as small as the Ranger’s RACK. Cragg remembered that he often dumped spent M4 magazines in the map pouch of his chest harness and got the idea to add slots into the cavity of the map pouch to allow magazines to be inserted
Quality Construction

Pick up a piece of S.O. Tech gear and compare it to anything on the market. Other brands often use cheap, rubber-coated cloth that cracks after getting wet and drying. S.O. Tech gear uses 330, 500, and 1000 denier Cordura, some of the strongest and most abrasion-resistant cloth available.

Polypropylene web snaps at half the strength of nylon. Nylon strength-rated webbing is used exclusively in S.O. Tech gear. They use heavier web when possible to add to the strength. They use the finest and strongest buckles and snaps, and stock even obscure buckle designs so they have just the right buckle for the mission.

Cheap thread abrades as it passes through the needle. S.O. Tech uses thick 92- and 138-weight bonded nylon thread (a mountaineering weight thread used on harnesses) as a standard on all S.O. Tech projects, while the industry standard is 69-weight thread because it meets the minimum military specifications.

The mountaineering 138-weight bonded nylon thread costs twice as much, plus S.O. Tech had to get all of their sewing machines bored out to accept it. S.O. Tech’s closed-cell foam, rubber grips, plastic, and other special materials are meticulously chosen to ensure durability and functionality under the worst conditions.

Check their standards against anyone else in the industry. While competitors are cutting corners and cutting costs in half by using cheaper materials, Jim Cragg still makes his gear like he did in the tiny shop by himself. Each piece is made with pride, by an American, for an American fighting man.