

One Paraplegic's Challenges in Starting a Manufacturing Business

by C. John Stanchina

Time – it's supposed to be the great equalizer, right? We're all given the same 24 hours in every day, aren't we? I would argue otherwise for people living with a disability (PWD). As a T-12 complete paraplegic, I figure I really only have 20 – 22 hours in my day to accomplish the same things able bodied individuals do. In effect, the extra time consumed by simple activities of daily living like showering, dressing, riding a stair lift and transferring into or out of a vehicle reduces the hours I have available to eat, sleep and, oh yeah, run a business.

In June 2007, I founded Blue Zone Enterprises, LLC to commercialize the Hound-a-bout™ hands-free dog walking system and the Utilitote™ hands-free rigid carrier. While I originally crafted these devices for my own personal use, after realizing how much these items improved my daily quality of life, I imagined that others who would (unfortunately) find themselves in a position similar to mine could derive equal benefit from their commercial availability.

One of the many challenges faced by people living with paraplegia is envisioning how to do more with less. If the arms are busy providing the mobility that the legs used to provide, how on earth are paraplegics supposed to be mobile and be able to hold a leash to walk their dogs, or to securely carry everyday items like groceries or laundry? These are the kinds of problems that the Hound-a-bout™ hands-free dog walking system and the Utilitote™ hands-free rigid carrier solve – they do what the hands and arms would be doing if they weren't busy pushing a chair.

While motivated by the prospect of providing solutions that speed the return of the injured to healthy, independent living, and by the opportunity to be the captain of my own ship, as a first time entrepreneur, I have also faced my share of obstacles. So many have been typical of hurdles that all entrepreneurs face – deciding how to fund the startup of operations; determining how to generate interest in an offering; and sourcing and vetting potential suppliers.

Other barriers, however, were unique to my disability. Electing to manufacture and ship Blue Zone Enterprises' products myself, from my wheelchair, posed its share of physical challenges. And as I mentioned at the beginning of this piece, although time management is an obstacle that all PWDs face, it posed a particular challenge to me, considering I was handling ALL of Blue Zone's business functions – prototyping, product testing, manufacturing, sales, record keeping, web development, information technology, copywriting, branding/marketing, public relations, finance and shipping.

So, how did I manage to pull it off? And more importantly, how can you? Planning. Thoughtfully planning both my workspace and my workflow helped me to use my time as efficiently as possible and my physical capabilities to their fullest potential.



The Hound-a-bout™ hands-free dog walking system in action



Installing overhead lifts saved valuable workspace, while the Utilitote™ carrier kept tools in easy reach

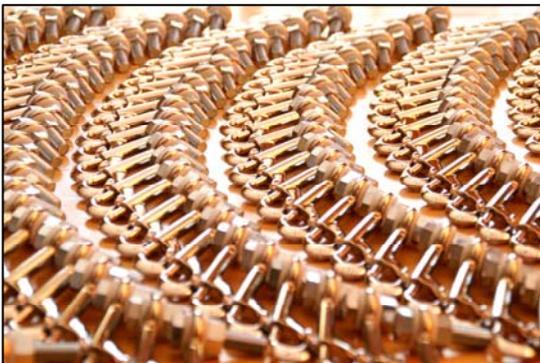
Here are just a few of the things I considered when I sought to optimize my workspace. Time spent navigating through a maze of raw materials, work in progress and finished goods is time wasted. So I installed half a dozen overhead lifts so whatever items I may not be working with on a given day can be stowed up and out of my way. Likewise, unnecessary movement between office space and manufacturing space burns precious minutes. So I connected my color laser printer to my wireless network and moved it from my office to the shop floor. That way, documents like invoices and shipping labels get generated right where I need them. Finally, struggling to move component parts, like the five-foot aluminum Hound-a-bout masts as they come in from the vendor that anodizes them, would be a real time killer. So I made it a point to maintain large enough access points to the manufacturing workspace so I am able to easily move goods in and out on my lap, from my chair.

When it came to optimizing my workflow, the practices that worked best for me focused on developing linear manufacturing procedures,

implementing batch processing where appropriate and breaking down more onerous tasks into bite sized pieces. One of the more “weighty” tasks I had to face was efficiently moving the sheer mass of Hound-a-bout masts I received from the vendors that extrude and anodize them (minimum order: 600 lbs.) Realizing my weight lifting limitations, I simply had the anodizing vendor shrink wrap the masts in bundles of ten. At a little more than 40 lbs. per bundle, I had no problem pulling them from my truck to my lap, rolling them into the shop, and tossing them onto an overhead storage lift. And the fact that they were bundled made the entire process far more efficient compared to having to handle each mast individually.



While bundling the Hound-a-bout™ masts in quantities of ten made their handling more manageable, carrying them crossways in my lap required a shop floor door wide enough to accommodate that technique

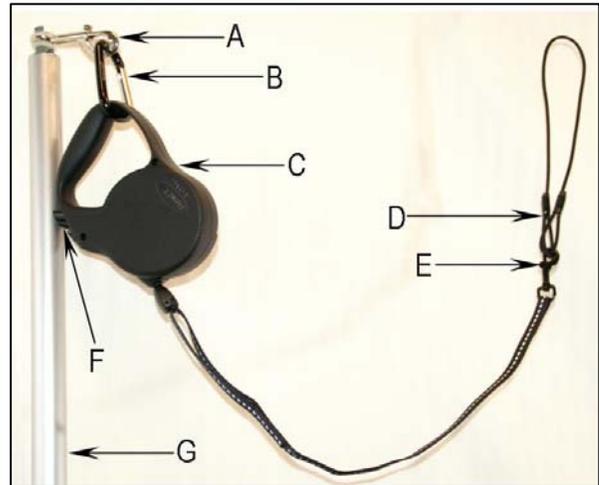


A batch of Hound-a-bout™ rotating leash anchor assemblies await installation on their masts; Batch processing items like these dramatically improves manufacturing efficiency

Also born from my need to reduce handling time was the development of a manufacturing procedure that kept work in progress moving in the same direction, while also taking advantage of the efficiency gains to be had from batch processing.. Doing the same thing, over and over again, helped me squeeze the most output from every minute worked. In practice, here's how it came together. Rather than assembling a single Hound-a-bout™ system at a time, from start to finish, I first put together a batch of the rotating leash anchor assemblies (pictured left) at a single workstation. I then move those assemblies to a second workstation where I clamp the aluminum Hound-a-bout mast in place, tap the threads required to receive

the rotating leash anchor assembly, and then insert and affix an assembly to the mast. At this point, I move the nearly complete Hound-a-bout system to a holding area where it waits to be mated with the carabiner and retractable leash upon shipping. Straight forward, with very little, if any, wasted movement.

This efficiency helps to free up precious time I can now spend on promotion, using tools like social media, and public relations activities, like writing articles such as this one. And if, by my having done so, fellow PWDs considering a foray into the experience of starting their own business are encouraged to take the plunge, it will have been precious time very well spent. So many of us understandably focus on regaining the independence taken from us by our injury or disease, so we are able to live as much like the able bodied folks we once were. Starting your own business just may give you the kind of independence that millions of able bodied people will *never* know.



Components of the Hound-a-bout™ system include: (A) Rotating leash anchor assembly; (B) Carabiner; (C) Retractable leash; (D) Dual-looped bungee assembly; (E) Leash clasp; (F) Leash release/stop button; & (G) Aluminum mast

C. John Stanchina is the Founder and Chief Executive of Blue Zone Enterprises, LLC – a company dedicated to the development of products and processes intended to help those paralyzed by injury or disease speed their return to healthy, independent living. C. John, himself, is a T-12 complete paraplegic, having sustained his spinal cord injury in January of 2000 in a downhill skiing accident. He currently lives in Plymouth, MN with his wife, Nicole, and their Jack Russell Terriers, Louie and Rodney. He can be reached via e-mail at CJohn@BlueZoneEnterprises.com or through his company's website, www.BlueZoneEnterprises.com.