



The Lighthouse for the Blind, Inc.
Jobs. Independence. Empowerment.

A vocation can instill a feeling of valued self worth and independence. A person with a work mission has a direction and feels empowered and is proud of their contribution to society.

In 1918 a growing organization that believed many blind people faced barriers in the areas of basic education, training and employment, incorporated as The Lighthouse for the Blind, Inc. The very first mission statement read:

To carry on any business, avocation or charitable work which shall contribute to the general welfare and well-being of the blind and those directly dependent on them and to maintain a workshop to make the blind self-supporting.

The Lighthouse believed that jobs were the first step on the path toward independence and self-sufficiency for people who are blind in the community.

The Lighthouse opened a manufacturing operation in a rented space in downtown Seattle, the current site of the Olympic Four Seasons hotel. This manufacturing operation concentrated on basket weaving, chair caning and broom-making.

In 1925, a larger facility was constructed on the waterfront at Elliott Avenue West and John Street, allowing expanded broom-making operations. Seattle citizens donated materials, funds and labor needed to construct this larger site. At this time, the Lighthouse employed fifteen people.

On June 25, 1938 a great thing happened for the blind; President Franklin D. Roosevelt signed the Wagner-O'Day Act into law. The law was so named after its co-sponsors, Senator Robert F. Wagner and Congresswoman Caroline O'Day. The Act directs government agencies to give



priority, when purchasing products, to suppliers who employ people who are blind. Years later Senator Jacob K. Javits led the efforts to expand the older law, which applied only to blind persons, and covered supplies but not services. The Javits-Wagner-O'Day Act is now a U.S. federal law requiring that all federal agencies purchase specified supplies and services from nonprofit agencies employing persons who are blind or have other significant disabilities. This Act was passed by the 92nd United States Congress in 1971.

In 1964, the Lighthouse merged with Handcrest Inc., until that point a state operated "sheltered workshop. Handcrest brought an entirely different product line, specializing in hand-woven textiles and machine shop work. After the merger the new Seattle Lighthouse employed over 100 people.

The Lighthouse for the Blind, Inc. moved to its present facility, located in the Rainier Valley, in 1967. Construction of the new building was financed by surpluses from manufacturing operations as well as through bequests and donations. The original 1967 building has been expanded several times and now occupies more than a full city block.

The 1970's brought major changes. The handicrafts of the past gave way to modern industrial manufacturing. Aluminum casels, binders, sponge mops and paper trimmers replaced brooms and baskets. Over the years, the Lighthouse has benefited greatly from its relationship with The Boeing Company, producing several thousand different airplane parts in their state-of-the-art machine shop. These changes gave blind people opportunities to work at jobs requiring higher skill levels and to gain skills that were marketable with other employers.

Let's go back a little

In 1952 things really started to pick up for The Lighthouse for the Blind, Inc; they started doing work for the Boeing Company. It started with some simple hand deburr work and evolved into some punch press work, and some break formwork. Today, the Lighthouse is a modern manufacturing company employing skilled machinists who utilize state of the art Okuma CNC machine tools including lathes and mills. The Lighthouse also delivers solutions for Injection Molding, Radio Frequency Sealing and Welding, Hydroforming, Sub and Final Assembly, Water-

Jet Cutting, Conventional and CNC Shearing, Metal Fabrication and Riveting, Non-Metallic Machining, Sawing, and Break forming. Today, the Lighthouse delivers over 85,000 parts a month to the aerospace industry and they are an ISO9001:2000 and AS9100 accredited manufacturer in both the Spokane and the Seattle facility. They employ the latest in lean manufacturing practices and technologies, resulting in superior quality and on-time ratings from their customers. The Lighthouse was so successful that it was awarded the Boeing Silver Supplier Status and is in the top 10% of their supply chain for quality and delivery, with acceptance ratings of 99.96% for Aerospace and 99.78% for non-Aerospace customers.

Pat O'Hara, VP of Operations at the Lighthouse views his key job function as keeping his team in the aerospace industry as a major high quality competitor. Pat started in 2005 for the Lighthouse and at that time they were using only manual Bridgeport equipment. The 7500-RPM machines were not a platform they felt they could grow on. Pat and the team wanted to expand the business and Pat was chartered with going out to the various machine tool suppliers and finding machine tools that had higher RPM spindles, in essence, more accurate equipment. They also wanted the machine tool supplier to take the voice recognition systems from the Bridgeport and carry that over to the newer machines so the employees could use the new CNC equipment.

Pat said, "The problem was the majority of machine tool dealers did not know how to get where we needed them to be! Okuma has been in the area for a long time and had very good equipment. During the time we were looking for new equipment Okuma's Director of Technical Sales, Marc Goerlich, came in on a cold call and we dragged him down to the shop floor to show him what we were doing and how we wanted urgently and seamlessly to carry over our voice and larger display systems to the newer faster more ridged equipment and take us to the next level."

Marc Goerlich took good notes and went back and talked to the Okuma software folks in North Carolina and they jumped on the opportunity to enhance their Okuma CNC machines so the blind could utilize them. There was immediately a meeting set up with the Lighthouse IT professionals and Okumas software writers. This team talked code together and the foundation was started. At the end of the many strategic meetings the Gosiger-Okuma team said, yes, we believe we can do this. Gosiger-Okuma joined forces and donated a great deal of the original 3 machines the Lighthouse bought and put



in their facility.

Pat said, "I'm guessing the Gosiger/Okuma team put in over 400 programming hours to help create what we have today; large print with a very large monitor, keyboards with braille on them, and the voice system completely integrated. These systems are completely accessible to a blind person, or a deaf person, or a person with low vision. We now have 15 Okuma systems and we are so very thankful to the Gosiger-Okuma team for helping our Lighthouse team and donating so much of their time to get us operational. This dedication to our goals has allowed us to gain more livable wage jobs and have more expertise on our shop floor, because we had highly capable people, we just needed to get the information in a way they could use it."

Can anyone imagine struggling with doing your own setups, getting your own tools, checking your own first articles...blind? It's hard enough in the world of sight. But just imagine what this team has put together for the blind and Deaf-Blind; they have the freedom to do their own work, by setting it up and checking it with enhanced machine tools that they can see with their ears and their fingers. It's a proud moment when a person can rejoice in their own work no matter what limitations their bodies have!

Marc Goerlich, Business Manager for Gosiger was the Technical Guru back when the Lighthouse started their journey upward. "Other company's software systems are pretty locked down," Marc said, "and the Okuma software platform is wide open which allows the user a sky is the limit opportunity to program any nuance they would like into their structure. We let a Lighthouse guy into the system control, he installed JAWS and just made my head spin with what he was able to do through the open software structure."

The information the Lighthouse affords their



machinists to set up their Okuma machines is very detailed. They receive much more than a machinist in other companies could expect, including audible directions on moving of clamps or bolts, where XYZ is, previous rejects or problems on part, and other features that keep them safe and keep them from crashing the machines.

From the Machine Shop

Daniel, now a journeyman machinist in training, came to the Lighthouse years ago and said he didn't know a thing about manufacturing. With the help of the Lighthouse staff Daniel quickly gained the confidence he needed to start his apprenticeship and learn his new job. Today Daniel has found his wife at the Lighthouse and has recently purchased his first home as a result of his success and growth at the company. In 2008 Washington State funded the creation of the Aerospace Joint Apprenticeship Committee (AJAC), a statewide, non-profit 501(c)(3) aerospace and advanced manufacturing registered apprenticeship program. Daniel has been in the AJAC program for years now and continues to learn manufacturing and machining techniques that further his knowledge and self-sufficiency. These skills have helped Daniel work with the highly efficient Okuma machines and maintain the confidence of a skilled machinist.

The fact that Okuma and Gosiger continue to say yes to the challenges of getting the blind what they need to continue to improve their interaction with the Okuma machines speaks loudly to the Gosiger-Okuma passion for the Lighthouse mission; Empowerment, Independence, and Jobs.

The Okuma-Gosiger Team has utilized the open-architecture of the Okuma machines, continued to keep an open mind to the Lighthouse crew and opened the world to the endless possibilities of can do machining with machining centers that bear the name of innovation, Okuma.

Pat continued, "Today we have over 241 employees in this location with more than 90 of them working in our machine shop. We are the largest employer of blind and Deaf-Blind people in the United States, and these highly trained individuals utilize the best machine tools on the market, Okuma. We have been able to go head to head with other companies and win work with our team and the Okuma CNC machine tools."

Pat and the team at the Lighthouse realize the aerospace industry fits their business model and they continue to bring in the best trainers to help the company in assembly, injection molding, titanium machining, sheet metal, hot forming and, cold forming.

Pat says, "We have an injection molding machine set up especially for the aerospace industry and we continue to invest in tools that can machine aerospace grade components. A good example of the talent, machines, and training we bring in our company and partner with is clearly our relationships with Gosiger Northwest and the Okuma America Corporation. The Okuma equipment we use, (at it's core) is the same high precision equipment utilized by many aerospace grade shops in the Northwest with some key advantages for the disabled. The disabled can operate these intricate high precision machines as if they could see and were not disadvantaged. It starts with the Okuma

THINC-OSP operating system control and the Okuma open architecture and its window based platform. This open platform allowed our Lighthouse IT department and Okuma to program Job Access With Speech (JAWS) through the control to make the machining centers totally accessible to the Lighthouse employees."

Since the enhanced Okuma machines hit the shop floor at the Lighthouse, Pat says they have taken their aerospace industry and increased the business over 250%. A lot of that has come from the platform they have chosen as their main machine line. Pat says the Okumas are faster, more rugged, and more precise. The impeccable service Gosiger continues to give them allows their Okuma machine spindles to continue to turn and maintain productivity. They have also taken this business model to their other affiliate organizations in Arizona and Wisconsin. These sister companies have the same accessibility and capability and they have empowered the blind people in their areas to become self-sufficient.

For more information on The Lighthouse For The Blind and the many ways they can help you with manufacturing, contact them at:

206-322-4200

www.thelighthousefortheblindinc.org

Watch this YouTube video for more information:

<http://www.youtube.com/watch?v=GqlsQO3hHGo>

For more information on Okuma and solving your most challenging production machining issues with the most advanced machine tools in the world, call

Gosiger: 253-278-1110, www.gosiger.com

