Devillers in the details

Former watchmaker offers an artisan's approach to missiles and more

BY MEGAN GESSNER, BOEING WRITER

Attaching a wire no bigger than a strand of hair, Christopher "Chip" Devillers peers through a microscope at his tiny world of work. This former watchmaker is most comfortable in small spaces.

Devillers is a technician at the Boeing Guidance Repair Center (BGRC) in Heath, Ohio. Or if you ask him, he'll tell you he is an electrostatically supported gyro navigator replacement, inertial navigation electronics cabinet lead technician, an appropriately precise role.

His up-close expertise ensures the readiness and modernization of guidance and navigation systems for a variety of platforms, including aircraft, submarines and Minuteman III intercontinental ballistic missiles.

PRECISION PERSONIFIED

Chip Devillers zooms to solder a high-voltage cable for a gyro can at the Boeing Guidance Repair Center in Heath. Obje

IOTO: MIKE ROSS/BOEING

"Gyroscopes and accelerometers have moving parts that could be complicated to make and repair. Watchmakers like me have experience working on small complicated items."

CHIP DEVILLERS, TECHNICIAN, BOEING GUIDANCE REPAIR CENTER

Comfort in Close Quarters: An Eye for Guidance and Navigation

During his 22 years at the BGRC, Devillers has intentionally gotten into tight spots. With his steady hand and eye for precision, he uses a microscope to solder cup terminals to accelerometer leads. Some components are smaller than a grain of rice.

"The instruments used in guidance systems are mechanical in nature," Devillers said. "Gyroscopes and accelerometers have moving parts that could be complicated to make and repair. Watchmakers like me have experience working on small complicated items and an understanding of what 'clean' means when it comes to small items."

Detail Oriented: Destined for Watchmaking

Devillers is at home in a world of detail because he spent much of his childhood tinkering with tiny watch pieces — wheels, gears, cogs and springs — to make them work in perfect harmony, offering a nearly imperceptible tick-tock to any who chose to listen. He listened closely.

"I enjoyed hobbies that required working with my hands," he said. When he turned 16, his parents entrusted him with his grandfather's watch. That gift was a spark.

GRANDFATHER'S GIFT

Devillers holds a pocket watch that belonged to his grandfather. When he received the gift at age 16, it sparked his love of timepieces.

PHOTO: MIKE BOSS/BOEING

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MINUTEMAN MAINTENANCE

Devillers and team help maintain the guidan system for Minuteman III intercontinental ballistic missiles.

PHOTO: U.S. AIR FOR

"The people we have working here are all true artisans, meaning they work with their hands to repair hardware."

MIKE MURASKY, SITE LEAD, BOEING GUIDANCE REPAIR CENTER



CLOCKWISE (From above left)

The Mount Vernon News featured Devillers during his early years as a watchmaker in Mount Vernon, Ohio.

The pocket watches that belonged to Devillers' maternal (left) and paternal grandfathers.

Devillers says in the world of timepieces, lady's wristwatches, such as this one, are made of some of the smallest components he's ever worked with.

The internal components of a watch that belonged to Devillers grandfather who carried it as a conductor on a coal train.

PHOTO: MIKE BOSS/BOFING







"My parents let me go into the watchmaker's shop so I could ask questions," Devillers said. In those moments, surrounded by watches and clocks, he says time stood still. He would often dismantle then rebuild watches on his own to visit a world many never notice.

Captivated, he decided to become a horologist, which he calls a "fancy name for watchmaker." After earning his degree, he worked near his home in Mount Vernon, Ohio, at a local jewelry store — which he would eventually buy and operate himself before providing his expertise to Boeing.

Collective Knowledge: Timely Gifts

Over the years, he's accumulated a few old American pocket watches. "Not a large collection, but geared more toward my interest in the history behind them," Devillers said. His favorites are heirlooms from both grandfathers. He even restored one of them — a railroad watch that belonged to his mom's dad, a conductor on a coal train.

Watchmaking is an art not often found in today's digital world. But his talent has stood the test of time. He's proud to be able to transfer those skills to benefit the BGRC, where he's a pivotal part of a team that provides high-quality products and services supporting everything from large systems to the smallest components.

"The people we have working here are all true artisans, meaning they work with their hands to repair hardware," said Mike Murasky, BGRC site lead.

The team's collective expertise ensures the continued smooth operation of enduring products, some that have been around for five decades or more. Original parts, or the suppliers or designs themselves, may not even exist anymore, affirming the BGRC's importance.

Devillers believes that, like an attractive timepiece, the look of the products he works on is just as important as their function.

"You'd think they were originals straight from the factory," Murasky said. IQ



SILVER ANNIVERSARY

The Boeing Guidance Repair Center in Heath, Ohio, celebrated its 25th year in 2021. In addition to maintaining the guidance system for the Minuteman III intercontinental ballistic missile, the site is also home to component assembly, integration and test activities for several Boeing aircraft production programs, including the KC-46A tanker, the T-7A Red Hawk advanced trainer and the MQ-25 unmanned aircraft system.

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