



### Military Contractor Depends on Durabook in Extreme Environments of Afghanistan and Middle East

#### CHALLENGE

Find a laptop able to withstand the extreme environmental conditions faced by military contractors, including sand and snowstorms, severe temperatures, and heavy rain.

#### SOLUTION

After careful reviews of available rugged devices, a DURABOOK semi-rugged laptop was selected for its potential to offer value and work reliably in demanding conditions.

#### RESULT

The semi-rugged DURABOOK withstood drops, heavy vibration, extreme weather, and other environmental challenges, delivering a reliable platform to conduct business, regardless of the challenge.



*I personally dropped my laptop at least 25 times from either falling off my desk (about a 4 foot drop) or falling off of the seat of my transport vehicle while driving. Good thing I had Durabook with the shock absorber mounts on the hard drive.*

— A military contractor and former member  
of the USAF and Army



# Military Field Case Study

Clarence Fung knows a thing or two about demanding work environments. He spent four years in the Air Force and another 16 years in the Army. He served on bases in the U.S. and abroad and was deployed to Operation Desert Storm in the early 90s. After 20 year of service to his country, Clarence worked in support of the military, providing services through military contractors. While contracting, he found himself in demanding locations like Kuwait, Afghanistan, and Kyrgyzstan performing battle damage assessment and repair (BDAR), working as a configuration technician, and holding additional duties in transportation and supply.

As a BDAR/Configuration technician, he had to monitor and physically check all Mine-Resistant Ambush Protected (MRAP) vehicles to insure they were up to date with the latest electrical, communications, mechanical, and weaponry updates. He also moved vehicles from one site to another, as well as off-loaded and on-loaded them to and from aircraft and ships.



THIS WORK COMBINED MOBILITY, HEAT, VIBRATION, DUST AND OTHER ENVIRONMENTAL CHALLENGES, WITH THE NEED TO ACCESS AND SHARE DATA CAPTURED IN THE FIELD. THIS IS WHEN CLARENCE FIRST FOUND A NEED FOR A FIELD-READY, DURABLE LAPTOP.



He first went with a custom device from a well-known computer manufacturer, but it failed to boot due to a defective hard drive, so it was shipped back to the States and a replacement was sent, but it also failed. At this point, he vowed to find a device that would not fail out of the box, or in the field, because the literal and figurative costs were too high.

After extensive research, he decided to invest in a Durabook semi-rugged laptop. He received the device while working in Afghanistan and also used it in Kuwait. Both locations, with extreme weather, rugged terrain, and unconventional work environments, were demanding to say the least.

The Durabook's ruggedness gave him confidence to focus on the mission and not worry about the reliability of his laptop.

The laptop was used in extreme heat, in temperatures that would cause most devices to fail. He often worked in the rain, because rain or shine, the laptop was an integral part of his job. Other challenges included desert sandstorms and the bright daylight found in the Middle East. The daylight viewable screen meant he would not have to pick up the laptop and move it side to side to get a better viewable angle, making his job much easier.



*"I definitely would recommend the Durabook to others. I know first-hand the device can take the bumps and bruises, dirt and dust, and especially the rain and still perform like new. My device has been dropped numerous times, tossed around from desk to floor, seat to floorboard, and still works fine. It's a very reliable machine, I would not hesitate to invest in Durabook again." stated Mr. Fung.*

## TIPS OF SELECTING MOBILE DEVICES IN DEMANDING ENVIRONMENTS

-  **Sunlight Readable Screen:** In bright daylight environments, a minimum 500nits (brightness) display with a wide-viewing angle is recommended.
-  **Shock and Drop Protection:** Computers used in the field by the military need to meet the MIL-STD-810G functional shock test from a height of at least 36 inches, providing protection from unexpected falls and vibrations.
-  **Sealed from Water, Dust, and Sand:** Devices expected to operate in harsh conditions, like rain, snow, dust, or sandstorms need to have an ingress protection (IP) rating of at least 53 and be MIL-STD-810G 510.6 Proc I & II certified.
-  **Wide-Temperature Range:** Rugged computers can be exposed to extreme temperatures and should be rated to operate from -35°F to 140°F.

