

GRAS MICROPHONES

Combat Proven

Acoustics



When you think of **combat-proven technology**, you may picture armored vehicles, radar systems, or missile defense. But behind many of these high-profile systems lies something far more subtle – precision microphones that detect, analyze, and survive the most extreme acoustic environments imaginable.

Lars Winberg

Sales Development Manager / GRAS

At **GRAS Sound & Vibration**, we design microphones to handle exactly that challenge. Today, our microphones are not only trusted in laboratories and aerospace test cells – they are deployed in real defense and security systems, on the frontlines where performance and durability mean everything.



Trusted Where It Matters Most

From border surveillance to battlefield detection, GRAS microphones are already making a difference:

- **Systems at the NATO Border**

Acoustic detection of gunshots is vital for border security. Systems, fitted with **GRAS 1/4" Microphone Set**, are deployed to monitor activity and provide real-time situational awareness. This ensures reliable operation in one of the world's most demanding environments.

- **Combat Deployment in Ukraine**

More than **200 gunshot detection systems** – each powered by GRAS microphones – have been delivered for use in Ukraine. In active conflict

zones, these systems must endure blast waves, gunfire, vibration, dust, and weather extremes while continuing to deliver pinpoint detection. GRAS microphones have proven they can withstand it all.

- **Artillery Detection**

Hostile artillery location system that incorporates GRAS microphones is deployed in Ukraine to track and locate incoming artillery fire. Here, every microsecond counts, and microphone accuracy directly translates to saved lives.

Why GRAS Microphones Thrive in Combat

What makes a GRAS microphone **combat proven**?

- **Extreme dynamic range:** Capable of capturing everything from ambient noise to the violent shockwaves of artillery and explosions – without distortion or damage.
- **Customized:** Designed to seamlessly integrate into defence applications like drone detection & tracking, sniper detection and artillery/mortar detection.
- **Rugged construction:** Built to withstand shock, dust, heat, cold, and long-term field deployment.
- **Calibration stability:** Ensuring consistent, reliable data even after repeated high-energy events.
- **Proven heritage:** Trusted by aerospace, automotive, and defense organizations worldwide for impulsive noise and blast testing.

Simply put, our microphones deliver **the same accuracy in the field as in the lab**, even when the field is a frontline.



Combat Proven. Mission Ready. GRAS.

Whether monitoring borders, detecting hostile fire, or supporting advanced surveillance networks, GRAS microphones have proven their strength under fire.

They are not just laboratory instruments – they are **combat-hardened sensors**, deployed today in real-world defense systems protecting soldiers, civilians, and infrastructure.

At GRAS, we are proud that our microphones stand quietly at the heart of modern defense technology. Reliable. Precise. Uncompromising.