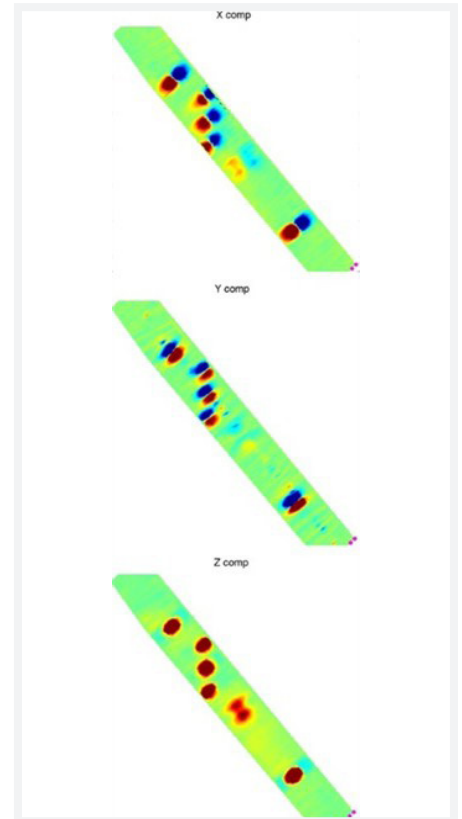




Gap EOD has developed the UltraTEM system to overcome problems related to outdated technology pervasive in the industry. The modern UltraTEM system allows us to survey faster, improve data quality, and image to greater depths.

- *The UltraTEM is a multi-component multi-sensor mobile frame that, when combined with one of Gap GeoPak's high powered transmitters, allows for ultra-high definition digital mapping with high efficiency.*
- *The system can distinguish closely spaced individual targets, provides accurate estimates of object position and depth, and produces auditable digital recording of all data.*
- *The UltraTEM system has proven its unique capabilities in production surveys for large-area UXO detection, deep bomb detection, and detection of ground engaging tools (GET) in mine stock piles.*



UltraTEM Operational Modes



Large-Area Search

- In Large-Area Search mode, the transmitter coil is located on the mobile frame with the sensors. This moving-loop configuration allows simultaneous targeting of small shallow targets and larger deeper buried targets to standard deep search depths.
- The array system can be attached to any type of prime mover (e.g., pedestrian, ATV) and is designed to cover large areas rapidly.



Ultra-Deep Search

- In Ultra-Deep Search mode, the transmitter is separated from the receivers in a large fixed-loop configuration, which enables very deep penetration of the excitation field and so increases the magnetic signature of deeply buried metallic objects.
- The use of Gap GeoPak's high-power transmitters enables the UltraTEM to work effectively in areas of magnetic geology that render standard EM equipment and passive magnetometers unusable.

Why UltraTEM?

Most companies dedicated to the clearance of Unexploded Ordnance (UXO) use outdated technology with a range of limitations:

- Single component sensors; leading to a lack of information about target characteristics
- Shallow detection depth; with a requirement to re-survey after digging up a shallow top layer
- Non-adaptive or non-digital processes; causing inefficiencies, time delays, and auditing issues
- Inefficient terrain traverses

The UltraTEM is a next-generation technology that suits the entire range of high fidelity target searches. The high clarity of anomaly data produced allows for dependable object discrimination, fewer false positives, and significantly greater clearance depths. This translates into clearing ground cheaper, faster and smarter.

Example Applications

The UltraTEM system has proven its unique capabilities in production surveys for large-area UXO and deep bomb detection, and detection of ground engaging tools (GET) in mine stock piles.

UXO detection

The UltraTEM suits the entire range of UXO clearance scenarios; high clarity of anomaly data produced allows for dependable UXO/scrap metal discrimination.

Deep bomb detection

Gap EOD has extensive experience with detection of bombs at depths where other geophysical approaches fail. This expertise stems from two decades of R&D and production surveys in geologically hostile terrain. The UltraTEM system has regularly outperformed the competition in industry trials.

Ground Engaging Tool (GET) detection

Gap EOD's UltraTEM system enables efficient and positive identification of stockpile GET to greater depths than other technologies (thus allowing greater lifts). This technology has been tested and proven successful during production surveys in the most challenging of environments.

