



INTRODUCING EXPLORATION FOR HUMANITY (EFH)

Exploration For Humanity, Inc. is a 501(c)3 nonprofit company that has been established to assemble a team of explorers and geophysicists to focus their diverse skills on a single objective: **landmines**

- * To detect and map landmines using drones equipped with geotechnology to support their removal;
- * To be a source for understanding the deployment of landmines, their detectability by geophysical exploration and the use of state-of-the-art exploration techniques in support of the demining Trusts which are active in helping afflicted countries with the removal of landmines after war activities are over.

SOME DEFINITIONS

What's Geophysics? The Natural Forces acting in the Earth.

(magnetism, gravity, electrical conductivity, elasticity/seismics)

What's A Drone? An Unmanned Aeronautic Vehicle, a UAV

What's Drone Geophysics? A UAV equipped with geophysical sensors

What's ERW? The Explosive Remnants of War.

(Abandoned war weapons and residual pieces)

What's UXO? Unexploded Ordnance,

(bombs that didn't go off and could still go off, landmines)

What's a Landmine? A war weapon designed to kill or maim whomever is nearby, fighter or civilian.

WHY USE GEOPHYSICS TO EXPLORE FOR LANDMINES?

Geophysical prospecting has been around for a long time, yet it is not used for landmine detection and mapping. Why not? Because it is too expensive, and was not developed for small-target definition. And there is only limited research being done today to make it more relevant for the world of landmine removal.

Today, hand held magnetic detectors are used to locate some landmines; this picture was taken in Armenia last year.], a slow going Other ways to search are by trained dogs, trained rats, and treasure hunting gear.



In 2016, the DroneMag system shown above was used to survey a test field in Germany that had various landmine and UXO targets in situ as well as new ones planted, resulting in the color map at right with target anomalies. The larger responses shown on the map were planted targets. The smaller ones were shrapnel left over from WW2. Similar technology is what EFH proposes to advance to landmine specific-operation, capable of distinguishing between targets and false positives.

