



**Geophex Ltd.**  
*30 years of excellence in EM  
instrumentation*

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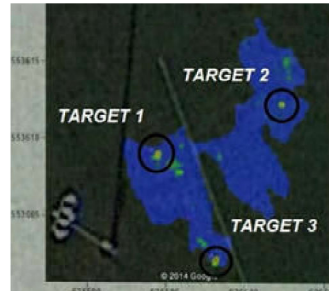
## ***Newsletter - June 2015***

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### ***UAVs and Geophysics - Geophex takes to the skies***

*As featured in the March 2015 issue of FastTIMES.*

The Geophex GEM-2 is a highly versatile electromagnetic instrument for geological, environmental, and geotechnical surveys; although designed to be hand-held, our users have carried it in Antarctica, pulled it around on sleds, lowered it sideways down boreholes and sealed it in tubes for underwater use.



Now, Geophex Ltd. and American Unmanned Systems ( [AmericanUnmannedSystems.com](http://AmericanUnmannedSystems.com) ) have successfully demonstrated the feasibility of performing EM surveys from an unmanned aerial vehicle (UAV). An unmodified GEM-2 was attached to the landing gear and used to survey an area near Norwalk, CT. A few different aircraft were tested; it was found that direct attachment to the helicopter, rather than hanging from ropes, provided the most stable platform. The processed data clearly shows two targets that were placed on the ground, as well as identifying a buried pipeline.

This summer, we will be flying our lightweight GEM-2 prototype to further advance the use of unmanned vehicles for conducting EM surveys.



Contact Geophex for more information.

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## ***Calling all teachers: How do you use your GEM ?***

Geophex instruments all share characteristics that make them versatile teaching tools.

- broadband operation from 30 Hz to 93 kHz
- 1 to 10 simultaneous frequencies
- can be used as a passive instrument
- included power line monitoring
- real-time display of in-phase and quadrature response

These characteristics make our instruments ideal for demonstrating various principles of geophysical surveys.

- Both the in-phase and quadrature response to a variety of targets can be displayed in real time.
- Target response at different frequencies can be demonstrated in real time.
- Low frequency operation allows use as an electro-magnetometer also.
- Geophex instruments can be programmed to work at the same frequency (ies) as other fixed-frequency instruments in order to investigate their expected response, even without the other instrument.
- Depth of exploration at various frequencies can be investigated, as well as 3-D imaging.
- EMIS (electromagnetic induction spectroscopy) can be demonstrated.
- Continuous data logging with embedded GPS location data provides data for mapping and inversions.

The GEM-2 has been called the 'swiss army knife' of geophysical instruments. If you are a student or instructor, we'd love to hear how you use your instruments.

Contact Geophex for more information.

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## ***Geophex announces rent-to-own program***

Geophex has been offering weekly rental of its GEM-2 'ski' for many years.

For many years, Geophex has been offering our GEM-2 'ski' for rental on a weekly basis in the U.S.A. and Canada. In addition to providing the instrument itself, we can advise you on carrying out your own survey and help you process the data. Contact us for more information.

Are you thinking of buying, but would like to try the GEM-2 before you buy ? Ask about our rent-to-own program. When buying an instrument, we will deduct 1/2 of any rental fees in the previous 12 months towards the purchase of a new instrument.

Contact Geophex for more information.

