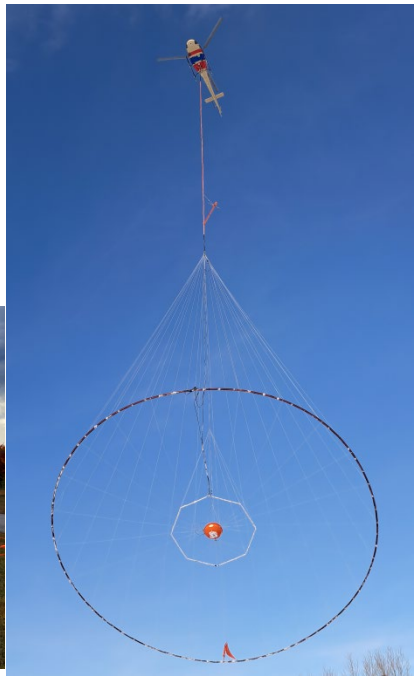
TargetEM

helicopter time-domain EM system



TargetEM is a new patent pending airborne time-domain electromagnetics system. TargetEM combines the latest achievements in electronics and sophisticated signal processing techniques to reliably deliver high-resolution geoelectrical data with the highest quality.

Specifications:

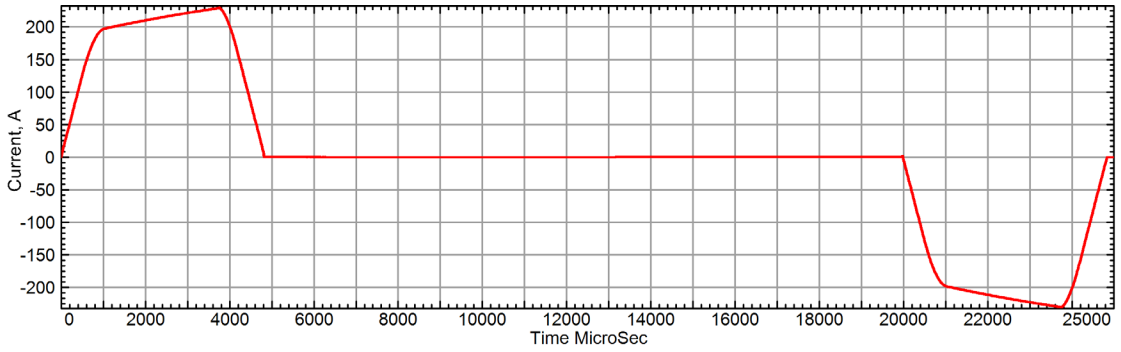
Transmitter loop diameter – 21 – 26 m
Number of turns – 4 - 6
Peak transmitter current – 230 A
Dipole moment – 320,000 – 700,000 NIA
Transmitter pulse shape – rectangular
Transmitter pulse width – selectable, typical 6 ms
Turn-off time – typical 1 msec
Base frequency – 25/30 Hz

Receiver – 3 orthogonal coils (X, Y and Z)
Number of turns – 120
Z coil diameter – 1 m
Full waveform recording at digitizing rate 73,728 Hz
Very high signal-to-noise ratio
Two formats of time-domain EM data output: - raw streaming data; stacked and processed data

The system is designed to provide VLF and AFMAG data along with time-domain EM data

Total field magnetometer in a separate bird 25 m above the EM receiver
Two GPS antennas – one on the helicopter and the second one on the mag bird

Transmitter pulse waveform example



TargetEM data example