

12 September 08

MEMORANDUM FOR:

SUBJECT: Contact Report, 10 September 2009 - Applied Energetics

1. Purpose

To discover if the company has any products that fit our search criteria for the project.

2. Contacts

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3. Topics Discussed:

Applied Energetics was formerly known as Ionatron. The company was restructured and the name was changed.

They have two products that address our interests in

The first product is not TRL6 or greater so it is a non-player. This product is a laser-based product that creates a "plasma channel", a hair thin electrical path of ionized particles, by a process of ionizing the air. Once the plasma channel has been created they can pulse a high power low frequency (1mV @1kHz) burst of energy over the path. This allows the destruction of electronic circuits and components as well as command wire devices. The device does not "neutralize" or "render safe" the target it destroys the circuits and detonates the device.

The second product is based on an electrode that can be mounted on an unmanned vehicle or on a mine roller (this is what the Marin Corp is doing). The electrode induces 1mV @ 1kHz of energy into the ground causing the destruction of electronic circuits and components as well as command wire devices to which the energy can propagate. The device does not "neutralize" or "render safe" the target it destroys the circuits and detonates the device. This product was tested and rejected by ATEC in April '06 and November '07. The company maintains that the reasoning is misunderstanding and politics. The company insists that the Marine Corp has embraced this product.

Both products offer only an offensive capability.

No briefing was available. More information, marginal in value, can be found at: <u>http://www.appliedenergetics.com/gov_mil.asp</u>.

4. Important Dates / Terminology:

We discussed a brief meeting the week of 06 October for a more formal briefing and a demonstration. It was discussed that this meeting would be dependent upon team approval.

5. Conclusion:

The second product may be of interest as it addresses command wire threats. There are several concerns with the product and company. Under the old structure of Ionatron there are legacy legal actions (http://www.azstarnet.com/sn/hourlyupdate/137907.php). The company was reborn as Applied Energetics 20 February 2008 (http://www.reuters.com/article/pressRelease/idUS168651+15-Feb-2008+BW20080215). The products are offensive only and the distance to target before device destruction was unclear, though they did strongly discuss that they are working on increasing the range. There was no clear declaration on the safety issues of such a high energy delivery to the ground with regard to people. I believe that even with the issues there may be enough potential value in a follow-on briefing and demonstration, based on the continuing interest of the Marine Corp.

6. POC for this memorandum is the undersigned,

Byron Spinney