V2k (Voice to Skull) Report 2 (Advanced) 18/05/2017

Targeted Individuals Association – Author: Gary Owens

Mr Gary Owens wrote the collated article and broke down the technology, we used every available source over the internet to collate and compile every piece of information out there that was needed to break down the technology, we have listed the sources of information at the bottom, if anyone's been left out let us know and we will amend.

Voice to skull is a complicated affair, the reason no one has broke it down is because its not one thing! It is comprised of different technologies! In order for you to understand V2k you WILL have to read all of the text! The good news is that the answer is there, clear as day!

http://www.targeted-individuals.co.uk/nano_3_rfid_implant_report_1.odt

V2k (Voice to Skull) Report 1 Available at this URL:

http://www.targeted-individuals.co.uk/v2k_voice_to_skull.html

This document is a follow up document to the base science I uncovered in the first V2k (Voice to Skull) Report.

In the first report I covered all the basic information you need to understand how V2k works, in this 2nd report I uncover the more advanced versions being run by our governments, on us, without permission.

The report clearly shows the Neural Dust that is being sprayed in the atmosphere all over the planet, and that it also works on exactly the same base technology that I uncovered in the first report. Read whats below and then imagine AI (Artificial Intelligence) controlling 6.5 Billion EEG Brains waves in real time, run by a super computer.

First some information from DARPA

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

http://www.darpa.mil/news-events/2016-08-03
Defense Advanced Research Projects Agency News And Events
Implantable "Neural Dust" Enables Precise Wireless Recording of Nerve Activity
First in vivo tests demonstrate ultrasound can be used to wirelessly power and communicate with millimeter-scale devices surgically placed in muscles and nerves

OUTREACH@DARPA.MIL 8/3/2016

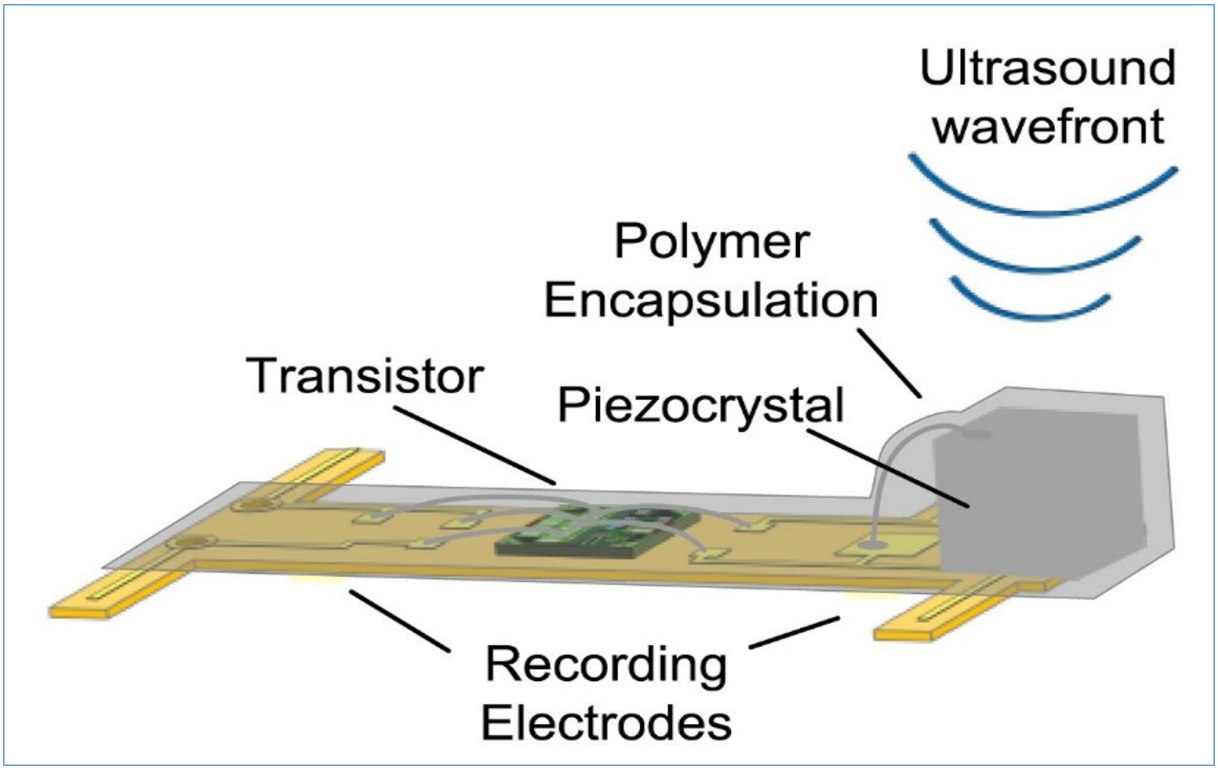

Image Caption: Each neural dust sensor consists of only three main parts: a pair of electrodes to measure nerve signals, a custom transistor to amplify the signal, and a piezoelectric crystal that serves the dual purpose of converting the mechanical power of externally generated ultrasound waves into electrical power and communicating the recorded nerve activity.
Therapeutic modulation of the activity of the body's peripheral nervous system (PNS) holds a world of potential for mitigating and treating disease and other health conditions—if researchers can figure out a feasible long-term mechanism for communicating with the nerves and pathways that make up the body's information superhighway between the spinal cord and other organs.

What does "feasible" look like? Small is the best start—small enough to someday perhaps be injected or ingested—but also precise, wireless, stable, and comfortable for the user. Modern electrode-based recording technologies feature some, but not all of these qualities. Hardwired solutions present challenges for chronic use, while existing wireless solutions cannot be adequately scaled down to the sizes needed to record activity from small-diameter nerves and record independently from many discrete sites within a nerve bundle. DARPA's Electrical Prescriptions (ElectRx) program is focused in part on overcoming these constraints and delivering interface technologies that are suitable for chronic use for biosensing and neuromodulation of peripheral nerve targets.

Now, as described in results published today in the journal Neuron, a DARPA-funded research team led by the University of California, Berkeley's Department of Electrical Engineering and Computer Sciences has developed a safe, millimeter-scale wireless device small enough to be implanted in individual nerves, capable of detecting electrical activity of nerves and muscles deep within the body, and that uses ultrasound for power coupling and communication. They call these devices "neural dust." The team completed the first in vivo tests of this technology in rodents.

"Neural dust represents a radical departure from the traditional approach of using radio waves for wireless communication with implanted devices," said Doug Weber, the DARPA program manager for ElectRx. "The soft tissues of our body consist mostly of saltwater. Sound waves pass freely

through these tissues and can be focused with pinpoint accuracy at nerve targets deep inside our body, while radio waves cannot. Indeed, this is why sonar is used to image objects in the ocean, while radar is used to detect objects in the air. By using ultrasound to communicate with the neural dust, the sensors can be made smaller and placed deeper inside the body, by needle injection or other non-surgical approaches."

The prototype neural dust "motes" currently measure 0.8 millimeters x 3 millimeters x 1 millimeter as assembled with commercially available components. The researchers estimate that by using custom parts and processes, they could manufacture individual motes of 1 cubic millimeter or less in size—possibly as small as 100 microns per side. The small size means multiple sensors could be placed near each other to make more precise recordings of nerve activity from many sites within a nerve or group of nerves.

Though their miniscule size is an achievement in itself, the dust motes are as impressive for the elegant simplicity of their engineering. Each sensor consists of only three main parts: a pair of electrodes to measure nerve signals, a custom transistor to amplify the signal, and a piezoelectric crystal that serves the dual purpose of converting the mechanical power of externally generated ultrasound waves into electrical power and communicating the recorded nerve activity. The neural dust system also includes an external transceiver board that uses ultrasound to power and communicate with the motes by emitting pulses of ultrasonic energy and listening for reflected pulses. During testing, the transceiver board was positioned approximately 9 millimeters away from the implant.

The piezoelectric crystal is key to the design of neural dust. Pulses of ultrasonic energy emitted by the external board affect the crystal. While some of the pulses are reflected back to the board, others cause the crystal to vibrate. This vibration converts the mechanical power of the ultrasound wave into electrical power, which is supplied to the dust mote's transistor. Meanwhile, any extracellular voltage change across the mote's two recording electrodes—generated by nerve activity—modulates the transistor's gate, which changes the current flowing between the terminals of the crystal. These changes in current alter the vibration of the crystal and the intensity of its reflected ultrasonic energy. In this way, the shape of the reflected ultrasonic pulses encodes the electrophysiological voltage signal recorded by the implanted electrodes. This signal can be reconstructed externally by electronics attached to the transceiver board to interpret nerve activity. "One of the most appealing features of the neural dust sensors is that they are completely passive. Because there are no batteries to be changed, there is no need for further surgeries after the initial implant," Weber said.

Another benefit of the system is that ultrasound is safe in the human body; ultrasound technologies have long been used for diagnostic and therapeutic purposes. Most existing wireless PNS sensors use electromagnetic energy in the form of radio waves for coupling and communication, but these systems become inefficient for sensors smaller than 5 millimeters. To work at smaller scales, these systems must increase their energy output, and much of that energy gets absorbed by surrounding tissue. Ultrasound has the advantage of penetrating deeper into tissue at lower power levels, reducing the risk of adverse effects while yielding excellent spatial resolution.

This proof of concept was developed under the first phase of the ElectRx program. The research team will continue to work on further miniaturizing the sensors, ensuring biocompatibility, increasing the portability of the transceiver board, and achieving clarity in signals processing when multiple sensors are placed near each other.

Image Caption: Each neural dust sensor consists of only three main parts: a pair of electrodes to measure nerve signals, a custom transistor to amplify the signal, and a piezoelectric crystal that

serves the dual purpose of converting the mechanical power of externally generated ultrasound waves into electrical power and communicating the recorded nerve activity.

So thats DARPA developing the advanced versions fo the medical industry and military iteligence, here below is the Governments own library for medicine.

National Center for Biotechnology Information

https://www.ncbi.nlm.nih.gov/pubmed/27497221

Neuron. 2016 Aug 3;91(3):529-39. doi: 10.1016/j.neuron.2016.06.034.
Wireless Recording in the Peripheral Nervous System with Ultrasonic Neural Dust.

Seo D1, Neely RM2, Shen K1, Singhal U1, Alon E1, Rabaey JM1, Carmena JM3, Maharbiz MM4.
Abstract

The emerging field of bioelectronic medicine seeks methods for deciphering and modulating electrophysiological activity in the body to attain therapeutic effects at target organs. Current approaches to interfacing with peripheral nerves and muscles rely heavily on wires, creating problems for chronic use, while emerging wireless approaches lack the size scalability necessary to interrogate small-diameter nerves.

Furthermore, conventional electrode-based technologies lack the capability to record from nerves with high spatial resolution or to record independently from many discrete sites within a nerve bundle. Here, we demonstrate neural dust, a wireless and scalable ultrasonic backscatter system for powering and communicating with implanted bioelectronics.

We show that ultrasound is effective at delivering power to mm-scale devices in tissue; likewise, passive, battery-less communication using backscatter enables high-fidelity transmission of electromyogram (EMG) and electroneurogram (ENG) signals from anesthetized rats. These results highlight the potential for an ultrasound-based neural interface system for advancing future bioelectronics-based therapies.

http://www.cell.com/neuron/fulltext/S0896-6273(16)30344-0?_returnURL=http%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS0896627316303440%3Fshowall%3Dtrue

https://www.youtube.com/watch?v=Dd0m0C3f158
https://www.youtube.com/watch?v=8wJ5Eff7hx0
https://www.youtube.com/watch?v=Dd0m0C3f158
https://www.youtube.com/watch?v=hmNzf9ztnAk
https://www.youtube.com/watch?v=b9r5ELJ2ATs

So its clear as day that the governments are behind this and that's good because it means we have a clear target to sue, in an impossible to loose case.

In this next document we look at the actual implants being removed from people, at the end of the document one of the organisations quoted is DARPA.mil same as the site above.

Criminal and Scientific Misconduct Involving Neural Prosthesis Research Funded by the NIH/NINDS/NPP and The Alfred E. Mann Foundation
http://www.targeted-individuals.co.uk/nano_3_rfid_implant_report_2.pdf

This is the RFID powder in commercial use, there is no difference only the software tasking.
http://www.targeted-individuals.co.uk/nano_2_rfid_powder.pdf

If you want to find out how deep the rabbit hole goes and your built like Einstine up top where it counts give these two documents a go.
http://www.targeted-individuals.co.uk/nano_1_mesogens.pdf

http://www.targeted-individuals.co.uk/nano_0_rfid.pdf

Many more documents on this subject are on the website:
http://www.targeted-individuals.co.uk/targeted_individuals_association_library.html

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http://targeted-individuals.co.uk/v2k_voice_to_skull.html

V2k (Voice to Skull) Report 2 18/05/2017
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Mr Gary Owens wrote the collated article and broke down the technology, we used every available source over the internet to collate and compile every piece of information out there that was needed to break down the technology, we have listed the sources of information at the bottom, if anyone's been left out let us know and we will amend.