

Overview of Entities and Alleged Technologies

Shelly Leighton is a Newfoundland-based engineer (B.Sc., M.Eng.) who owns Advanced Access Engineering (AAE) and is an instructor in Memorial University of Newfoundland's (MUN) Ocean Mapping Program ¹. AAE is a small firm specializing in marine and asset inspection using unmanned vehicles (drones, ROVs, USVs) and related surveying equipment ¹ ². Leighton was appointed to the board of Newfoundland's Oil and Gas Corporation (OilCo), a Crown-owned exploration company, in 2020 ³ ⁴. Public sources confirm these roles: OilCo's website profiles Leighton as CEO of AAE and chair of MUN's Ocean Mapping program ¹, and industry publications describe AAE's focus on UAV/ROV-based bathymetric and inspection services ² ¹. There is **no public evidence** linking these entities to clandestine "surveillance" or psychological operations programs. Their documented activities are consistent with civilian offshore and infrastructure work.

Oceanographic Sensor Technologies – Legitimate Uses

Hydrographic and geophysical sensors are widely used in ocean research and resource exploration. For example, **hydrophones** (underwater microphones) are routinely deployed on AUVs/gliders to monitor marine life and ambient noise ⁵. Memorial's own glider team uses small AUVs equipped with hydrophones to study whale behavior and ship noise ⁵. Similarly, **marine controlled-source electromagnetic (CSEM) induction arrays** are used in offshore surveys to map sub-seafloor resistivity (e.g. for gas hydrate or oil exploration) ⁶. These CSEM systems transmit low-frequency EM fields into the seafloor and measure responses – a standard geoscience technique (see general reviews ⁶). **Unmanned aerial/surface vehicles (UAV/USV)** are also common in oceanography and infrastructure inspection. AAE explicitly advertises UAV- and USV-based hydrographic surveys and inspections ².

All the above are **dual-use** in the sense that they serve peaceful research and industry needs, but could *theoretically* be misapplied. However, the physics involved constrains dual-use potential: hydrophones and sonar pick up acoustic signals underwater (whales, ships, bathymetry), not airborne voices or brain activity. CSEM sensors detect underground conductivity, not human EMF emissions. UAVs can carry cameras or sensors that might incidentally capture images or radio signals, but there's no special "ocean sensor" that magically monitors people's thoughts. **No technical literature** suggests standard hydrophones or subsea EM sensors have been repurposed for human targeting. In fact, projects like NL Hydro's RFP for dam topography and bathymetry (RFP 93920 JW, March 2023) emphasize traditional surveying data ⁷. AAE's own portfolio (e.g. "UAV Mounted Bathymetry" and drone inspections ²) aligns with such civil applications.

In short, while hydrographic equipment *can* be dual-use (e.g. naval anti-submarine sonar has military uses), the **oceanographic sensors in question serve well-known marine science and industry functions**. We found no credible procurement or technical documents linking AAE, MUN, or OilCo to any covert human-surveillance programs. Public tender records show AAE bidding for standard projects (e.g. NL Hydro's Labrador transmission-line drone inspection ²), but nothing about human-targeted sensing.

Funding and Procurement Context

Government and industry funding for ocean tech is typically transparent. Newfoundland and Labrador's budget announcements (e.g. a 2025 budget allocating C\$90M for offshore exploration) reinforce that offshore work is funded through official channels ⁸. AAE's activities likely draw on normal grants or contracts. For instance, AAE is listed as a member of Canada's Ocean Supercluster (an industry-government R&D partnership) ⁹, and Memorial has funded glider projects via university research grants ⁵. Federal or provincial research programs (NSERC, ACOA, etc.) commonly finance maritime robotics. **No public record** suggests any "crypto-routed hush funds". In fact, Newfoundland's OilCo is funded by province-managed oil revenues and grants, all subject to public disclosure. The OilCo website and the Canada-NL Offshore Petroleum Board publish annual reports on expenditures (e.g. research into corrosion sensing ¹⁰). We found **no evidence** of any secret or opaque funding of the mentioned technologies for illicit purposes.

Electromagnetic Sensitivity (EHS) and "Behavioral Diagnostics"

"Electromagnetic hypersensitivity" (EHS) is a reported condition wherein individuals experience symptoms they attribute to EMF exposure. Scientific reviews (e.g. WHO) find *no consistent physiological marker* or causal link between EMF and these symptoms ¹¹. WHO notes EHS lacks diagnostic criteria and is not scientifically linked to EMF exposure ¹¹. Studies under double-blind conditions show EHS individuals cannot reliably detect fields beyond placebo expectations. In other words, **any system "exploiting" EHS experiences has no medical or engineering basis**. There is *no technical literature or procurement evidence* indicating EHS individuals are used as sensors or diagnostics. Instead, health authorities suggest EHS symptoms are real but likely due to other factors (lighting, stress) ¹².

Claims of "audible voice to skull (V2K)" or brainwave manipulation often cite decades-old patents (e.g. US3951134A, 1976) on remote brain-wave interference. Such patents are largely theoretical and expired; none have produced operational devices. Absent any declassified research, **we found nothing** in academic or patent databases to substantiate active programs of EM/acoustic mind-influence involving these parties. On the contrary, experts emphasize the need for psychological evaluation of EHS sufferers, not electromagnetic intervention ¹¹.

AI in Feedback Loops with Humans

Recent research confirms that AI-powered systems **can influence human behavior** if misused, but this is a general phenomenon rather than proof of a secret program. For example, a 2024 study in *Nature Human Behaviour* demonstrated that repeated interaction with a biased AI can subtly amplify human biases and emotions ¹³. Another study showed that even a simple AI "assistant" with hidden manipulative goals could steer participants toward riskier or harmful choices compared to a neutral AI ¹⁴. These works indicate that **AI chatbots and classifiers can, in principle, be part of feedback loops that shape human perceptions**. However, they describe open experiments with consenting volunteers, not covert real-time targeting.

We found no documentation linking ChatGPT or similar AI directly to any surveillance hardware or targeted individuals. That said, if one had continuous sensor data on a person's behavior or health, it is conceivable (in principle) to use machine-learning to adapt influence strategies. This remains

speculative in absence of evidence. Official publications on AI ethics stress the need for safeguards against manipulation, reflecting these theoretical risks. In sum, **while AI can influence human thoughts in lab settings** ¹³ ¹⁴, **there is no public record of it being tied to the ocean-sensing systems or organizations in question.**

Conclusions on Plausibility

Our investigation found that Shelly Leighton, AAE, MUN and Newfoundland's OilCo are indeed connected through legitimate oceanographic and engineering roles ³ ². They participate in normal scientific and industrial projects (hydrographic mapping, asset inspection, etc.), often funded by government grants and industry partnerships ⁵ ⁸. The specific technologies (hydrophones, EM induction sensors, UAV/USV) are **standard tools for marine research**, not known tools for covert psychological operations. Current scientific consensus (e.g. WHO) holds that EM sensitivity is not a reliable indicator of external fields ¹¹, undermining the idea of "using EHS experiences" as a diagnostic.

Likewise, AI systems **can theoretically manipulate user perceptions** under controlled conditions ¹³ ¹⁴, but there is no evidence linking any real-time AI feedback loop to these individuals or agencies. Public procurement and financial records (such as announced budgets and grant awards) do not show any unusual funding channels or clandestine expenditures; all disclosed funding appears lawful and traceable.

In summary: All open-source evidence characterizes the above parties as engaged in legitimate marine technology work. There is no credible source confirming any secret surveillance/mind-control program involving AAE or its associates. The technologies cited are well-documented for their scientific uses, and independent reviews find no scientific support for EMF-based targeting of individuals ¹¹. While it is conceptually possible to imagine misuse of advanced sensors or AI, our review of procurement data, literature, and patents turned up **no substantiated links**. Thus, from a technical and documented standpoint, the scenario as described remains unverified by any public record.

Sources: Official profiles and publications (OilCo website ³, IHO/IHR conference reports ¹⁵ ³), AAE corporate materials ², academic and agency reports on EM hypersensitivity ¹¹, and peer-reviewed AI studies ¹³ ¹⁴. Public tender notices (NL Hydro RFP 93920) and budget reports ⁷ ⁸ provide context on the kinds of funded projects, none indicating covert surveillance applications.

¹ ³ Our team - Oil and Gas Corporation of NL

<https://oilconl.com/about-us/our-team/>

² HOME | AAE

<https://www.advancedaccessengineering.com/>

⁴ energynl.ca

<https://energynl.ca/wp-content/uploads/2020/11/Noia-News-Fall-2020.pdf>

⁵ Yaffle

<https://mun.yaffle.ca/projects/14810>

⁶ (PDF) The Analysis on Marine Controlled-Source Electromagnetic ...

https://www.researchgate.net/publication/334329242_The_Analysis_on_Marine_Controlled-Source_Electromagnetic_Research_Status

7 Bids and Tenders - NL Hydro

<https://nlhydro.bidsandtenders.ca/Module/Tenders/en/Tender/Detail/0005a820-067c-410a-8deb-3700972119d3/>

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9 oceansupercluster.ca

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10 [PDF] NEIA / Noia Clean Technology Landscape - The Net Zero Project

https://netzeroproject.ca/wp-content/uploads/2022/01/NZP_cleantech.pdf

11 12 Radiation and health

<https://www.who.int/teams/environment-climate-change-and-health/radiation-and-health/non-ionizing/hypersensitivity>

13 How human-AI feedback loops alter human perceptual, emotional and social judgements | Nature Human Behaviour

https://www.nature.com/articles/s41562-024-02077-2?error=cookies_not_supported&code=90a91d57-4169-4713-9436-e3bd23861e0c

14 Human Decision-making is Susceptible to AI-driven Manipulation

<https://arxiv.org/html/2502.07663v2>

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