Technology Committee Report

National Association of Ordnance Contractors

Committee Monthly Update

April 26th, 2023

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SAGEEP 2023 / 2nd Munitions Response Meeting

- Meeting was very successful.
- Consolidating MRM presentation PDFs and hope to make available next week.
- Best of SAGEEP M2S2 Webinar – June 28th, 2023 – 7-9 presentations being selected for the M2S2 webinar
- Starting to plan for 3rd Munitions Response Meeting in 2025. Updates to come.

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Kaarta Status Update

Dave Duggins

KAARTA Status

❑ On January 31, 2023 Kaarta ceased normal operations

❑ Ongoing support has been provided by Dave Duggins, Dan Romanelli, and Brian Berke as needed

❑ In March 2023, Kaarta has entered into an agreement with Near Earth Autonomy, Inc to sell / support Stencil 2 and Stencil Pro products and provide warranty / non-warranty support

❑ All existing warranties will be honored. All new sales come with a 3 month warranty

❑ Over this year, Stencil 2 will be transitioned to Near Earth's Topaz product line. Topaz is a higher powered processor and more environmentally sealed and provides a path forward for future hardware and software updates.

March 20, 2023

As has been shared recently, KAARTA ceased operations at the end of January. To maintain customer service, warranty, and to provide sales to interested customers, the KAARTA board of directors authorized Near Earth Autonomy to provide sales and support activities on KAARTA's behalf.

Will Near Earth Autonomy provide support for previously sold KAARTA products?
All existing warranties on KAARTA products will be honored for the duration of the warranty. Hardware replacement/repair past their warranties will be considered on a case-by-case basis. No further hardware/software/driver updates are planned for KAARTA systems.

Will Near Earth Autonomy provide warranties and support for new sales of KAARTA products?
Sales of new Stencil 2 and Stencil Pro devices will include a 3-month hardware warranty. Contour sales will not include a warranty. All sales will include online training and initial project support. Further project support can be evaluated as required.

Will Near Earth Autonomy provide any future product development or device sales?
Yes, Near Earth Autonomy's Topaz is used for mobile mapping from ground and aerial vehicles. The Topaz inherits Stencil 2's size and applications and will continue to be improved overtime.

Who can you contact at Near Earth Autonomy for sales and support?
Near Earth Autonomy is committed to supporting KAARTA's customers. For all sales and support inquiries, please write to:
solutions@proxim.aero

Near Earth Autonomy's extensive team, knowledge, and resources are available to assist you. Pleaser reach out with any questions. We look forward to continuing to support your business.
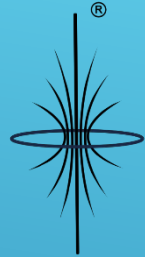
-- Near Earth Autonomy Team

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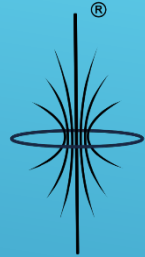
Update

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QUESTIONS FROM SAGEEP:

➢ Please confirm that the system is DAGCAP approved for dynamic, cued, and one-pass operations.

✓ Yes, the Temsense™ system is fully approved.

➢ Please confirm the system supports the DoD's HDF5 EMI v1 specification.

✓ Yes.

➢ Is the system for sale, and how many are available?

✓ The systems will not be available for sale. Multiple systems are available for lease.
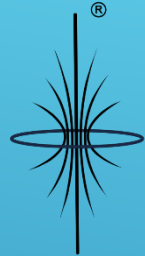
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QUESTIONS FROM SAGEEP:

➢ What does the system weigh?

✓ The backpack weighs 30 lbs. The cart weighs 90 lbs.

➢ What geolocation systems are compatible with the Temsense™?

✓ The system is fully compatible with RTK/GGA, RTS, and Kaarta Stencil 2. All have been used in the field without issues.
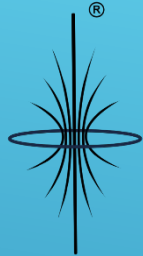
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➢ Can the system be used in litter mode?

➢ Yes. The Temsense^{TM} system is easily converted to be used in litter mode.

➢ What is the height above ground?

➢ 20 cm

➢ Will the company be making a towed array and/or a handheld system?

➢ There are no plans to make a towed array, although the engineering is complete to do so. We are presently developing designs for a handheld system, but no timeline yet.
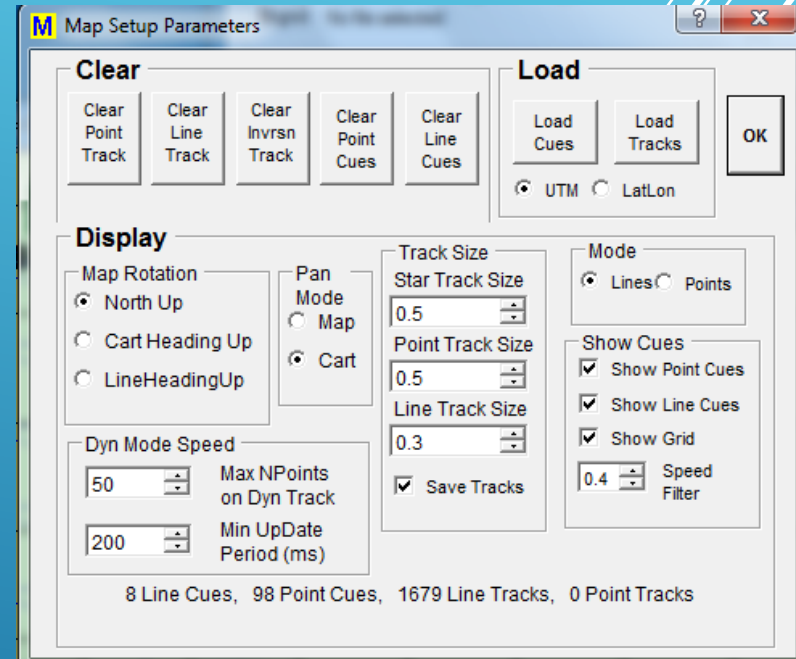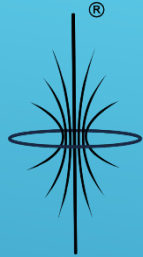

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➢ Does the system show course over ground and missed coverage areas?

✓ Yes, and this capability has been available from the outset.

- ▪ The Temsense™ navigation display can be used in 3 modes: a) cart "up", b) North "up", or c) track "up".
- ▪ The Map Setup Parameters are displayed as shown in the picture at right, showing all user definable choices. From the setup screen, you may load .csv files to create lines or points. The setup will also permit the operator to select choices of heading, line width and past coverage.
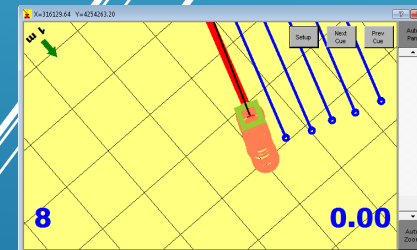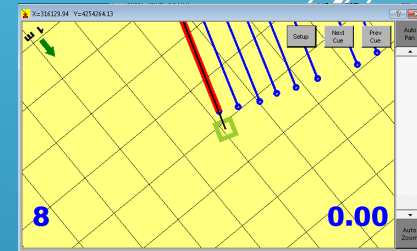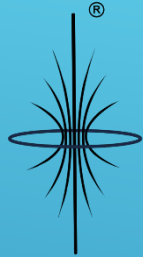

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➤ What does the display look like?

a) The cart (represented as the green square) is shown preparing to navigate to the line. The display provides constant directional feedback by showing a guidance line ahead of the cart, and permits the operator to adjust course over ground in real time.

b) As data is collected, the display shows the cart navigating on the guidance line. The width of the coverage line is adjustable. The covered area as the cart traverses along the guidance line is displayed.
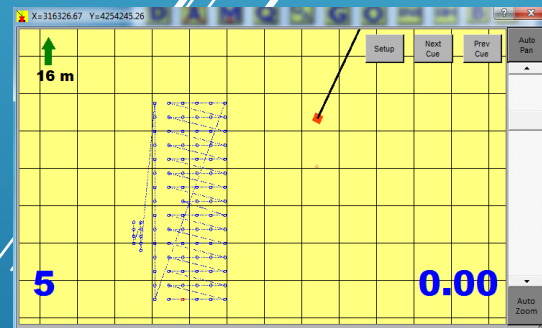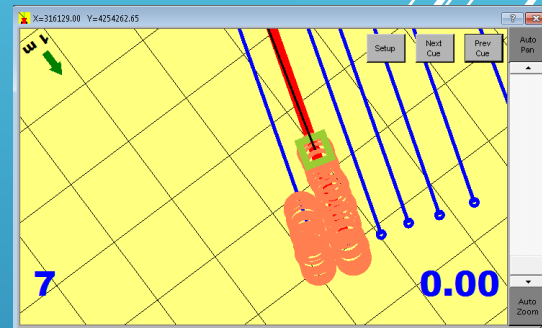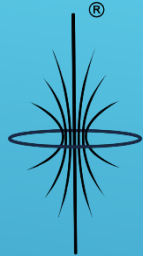

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➢ What does the display look like?

c) As data is acquired, each subsequent guidance line is painted to show total coverage and any missed areas. By adjusting the width of the coverage circle in setup, the operator may select the degree of overlap for each traverse along a guidance line.

d) Once loaded, the operator may select either lines or points, and navigate to either. When lines are selected, the line name will appear in the lower left corner, and speed displayed in the lower right corner.
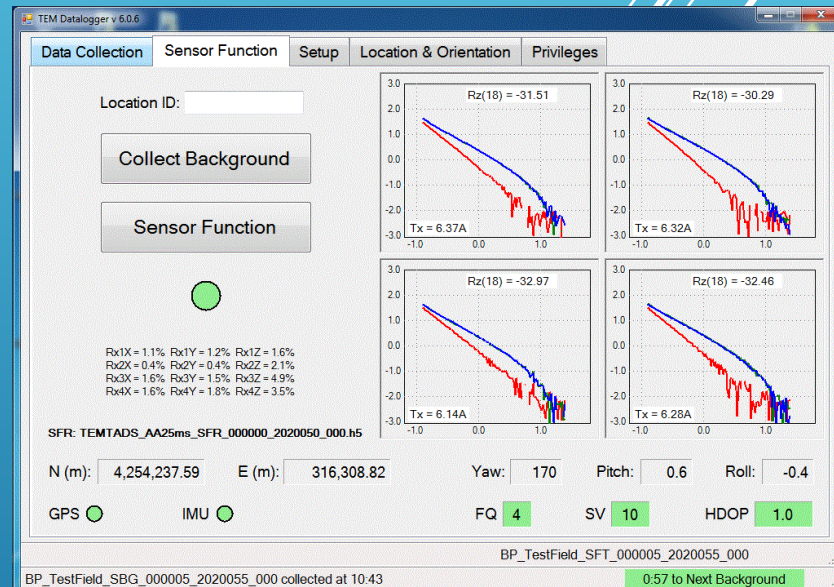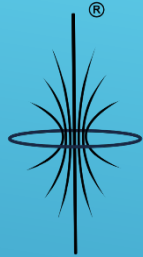

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➢ Are there any other features that help the operator know the system is functioning properly?

✓ Yes. As an example, the operator may select this view, which shows the background subtracted polarizabilities of an ISO Schedule 80 centered vertically above the sensor. The left side of the screen compares the polarizabilities to the Reference SFT file and produces a percentage value for each axis individually.

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Any additional questions regarding performance or availability may be directed to the following:

Contact Information:

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703-901-4870

Seequent
Update

Seequent Updates

Join us for this week's event on how quality assurance (QA) is advancing UXO detection! Our panelists will share insights on acceptable risk, quality control, available technology to meet demands, and the industry's future directions. Space is still available. Register online to attend the event and receive a recording.

[Panel Discussion: How QC Drives Innovation in UXO Detection (seequent.com)](#)

NAOC Webinar Series

❑ Registration opening soon for new webinar. Hosted by EA Academy

❑ **Title:** Supporting Decisions Using GIS
Date/Time/Duration: May 18, 1300-1400 CST (1400-1500 EST)
Presenter: Elise Goggin - USACE EM CX

❑ **Stencil SLAM** – Planning Considerations and Lessons Learned – Dave Duggins – June or July (TBD)

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Miscellaneous Topics

❑ IVS Memo Template – EMCX had call this week and are still trying to resolve formatting issues

❑ EM-200-1-15 – Completed - waiting for USACE HG approval – expected 1st calendar quarter of 2023. No Update

❑ SERDP ESTCP IPRs – May 16th – 19th – Agenda attached to email

❑ M2S2 Webinars – NAOC Led

❖ Webinar #2 – *Best of SAGEEP* - June 28th 2023 1300 – 1500 Eastern

❑ Next M2G2 call – May 10th, 2023 – RA QAPP Toollkit 2 discussion + other topics TBD

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Technology Committee Contact

QUESTIONS ?

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Chair, Technology Committee

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