Sandia National Laboratories

TacNet Tracker: Handheld Tracking and Communications Device

BENEFITS

- Secure encryption
- Light weight and portable
- Tracking capabilities via GPS or mesh positioning
- Bluetooth communications and USB ports
- COTS components and customizable software
- Lower manufacturing costs
- Mesh network capable

APPLICATIONS

- Corrections — Jails/ Prisons
- Military
- Outdoors Industry
- Law enforcement
- First responders
- Mining Industry
- Secured Access Facilities

U.S. PATENTS PENDING ON SD#

- 10236

INTELLECTUAL PROPERTY & LICENSING CONTACT

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Summary

The TacNet Tracker is designed to transport information securely via portable handheld units without the need for fixed infrastructure. The low profile device is easily worn to provide users with real-time location tracking, communication with other users, and shared information along a secure encrypted self-forming and self-healing network. This line-of-sight network is essentially a custom, privately owned Internet with the capability to self-form on a second-to-second basis. If a unit becomes separated (e.g., line-of-sight is lost), the remaining components "self-heal" the network by forming another path. Because of the mesh network's multi-hopping capabilities, the TacNet Tracker can create secure paths around obstructions that might hinder a regular radio.

The device has similar communication and data-sharing capabilities as a laptop computer, but in a much more compact, lightweight format—approximately the size of a smartphone. The TacNet Tracker also provides additional functionalities—including Bluetooth communications, USB ports, and tracking with GPS or mesh positioning.

Licensing & Partnering Status:

Various license and partnering options are available. Please contact the Intellectual Property department to discuss.

Technology Readiness Level:

Sandia estimates this technology's TRL at level 8. The device has been proven to work in its field of use under expected conditions and has achieved actual system completion.

National Nuclear Security Administration

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