

2018 Innovation Award



US Army Tactical Communications and Protective System (TCAPS)



Feb 16, 2018



TCAPS

Program Executive Office Soldier

Mission:

Develop, acquire, field, and sustain affordable, integrated, state-of-the-art equipment to improve Soldier dominance in Army operations today and in the future.



TCAPS

Current Team Members/Support Organizations

- Assistant Product Manager – CPT Effens Bowden
- Training Coordinator – MSG Aaron Atchley
- System and Test Engineering – Mr. Collin Drennen
- Operations – Ms. Jessica Lucy
- Logistics Support Manager – Ms. Margaret Livesay
- Test Coordinator – Mr. Timothy Massey
- Hearing Center of Excellence Subject Matter Expert – Mr. Robert Williams
- Support Organizations: Office of the Surgeon General, Public Health Center, Walter Reed National Military Medical Center, Army Audiology Community



TCAPS

THE CHALLENGE

Veteran disability benefit claims for hearing loss has continuously increased since 1999. Since 2009, the percent of positive Significant Threshold Shifts (STSs), as indicated by the Army Hearing Program, has shown a relatively steady decrease through 2017. The TCAPS program aims to decrease post-service hearing loss claims, as well as aiming to decrease the occurrence of STSs for Active Army Soldiers.

TCAPS represents the first Army Program of Record addressing hearing protection.

THE INNOVATION



TCAPS

- Utilizing Commercial off the Shelf (COTS) products, TCAPS provides Soldiers with advanced, active hearing protection that simultaneously protects Soldiers' hearing while enabling situational awareness and mission command.
- This COTS approach allows rapid adaption of the latest commercial technology.



TCAPS

THE INNOVATION

- With TCAPS/TCAPS-Lite, Soldiers no longer have to choose between hearing protection and situational awareness.
- TCAPS will reduce the occurrence of removing a Soldier from a combat role due to hearing loss.



TCAPS

THE INNOVATION

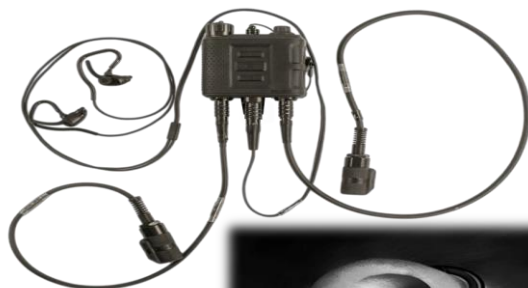
- Develop new and innovative procedures to procure, test, deliver and train users on new active hearing protection devices;
- Work to restore a soldier's confidence in hearing protection devices -to restore the confidence that something *can* be done to protect his or her hearing.

Fielded TCAPS and TCAPS-Lite Devices



TCAPS

Connects
to Radio 2



Connects
to Radio 1



TCAPS – INVISIO X50

- Active hearing protection: Reduces harmful impulse (gunfire) and steady-state (engine) noises to safe levels
- Hearing enhancement capability
- Sound localization capability
- Up to 2 radios can be attached via cables for voice communications

Fielded TCAPS and TCAPS-Lite Devices



TCAPS

TCAPS-Lite: 3M TEP-100 and COMTAC III



- Same basic capabilities as TCAPS (hearing protection/enhancement/sound localization)
- Does not connect to a radio via cable, but user can still communicate using hand-microphone equipped radios
- Includes Medical Contingency (COMTAC III) that features replaceable hybrid foam/gel ear cups

HOW IS THE INNOVATION IMPLEMENTED?



TCAPS

- TCAPS/TCAPS-Lite are issued primarily to combat Infantry Soldiers.
- Partnered with and received support from the medical community
- Before being issued the system, each Soldier was:
 - Properly fitted with TCAPS/TCAPS-Lite
 - Provided with a mix of classroom instruction and hands-on exercises

FUTURE OF THE INNOVATION

- Periodic evaluation of COTS devices that offer enhanced capabilities and increase Soldier acceptance at a lower cost.
- Establish a consistent line of communication with fielded units to get feedback on what works, as well as with other military organizations for program improvement.

LESSONS LEARNED

- Continue to solicit feedback from Soldiers
- Comfort, convenience, and cost should always be kept in mind.
- Competition reduces costs.
- Demonstrate program success
 - Identify metrics that show the impact of TCAPS/TCAPS-Lite

SIGNIFICANCE OF THE AWARD

The TCAPS Program is honored by the recognition for the promotion of hearing protection and conservation within the Army. This honor would not be possible without the resolve of our industry and government partners to help provide Soldiers with the best hearing protection available.

This award should provide the program with leverage to grow and get stronger, and for accountability at all levels.

CONTACT INFORMATION

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