# SABOT-X

U.S. Army Gunnery Skills and Conduct of Fire Training Software & Mobile App

**MAJ Jake Robbins** 



# Background

"Gunnery" - the science and art of accurately directing and firing weapons.

**Target Acquisition** 

**Engagement Sequence and Commands** 

**Degraded Firing Skills** 

Movement and Maneuver of Vehicle

Crew Proficiency, Procedural Errors, Safety Measures



### **Training Progression:**

Start: Indiv. Position qualification (COFT-E) -> TC/GNR gate (AGTS) -> Crew Gate (AGTS & C-AGTS)

- -> Crew Dry Gate (Table 3) -> Crew Live (Table 5) -> Crew Qualification (Table 6)
- -> Wingman Gates (CCTT) -> Wingman Qualifiers (Mix. SIMS) -> Wingman Live (Tables 5/6)
- -> Platoon Gates (CCTT, TOC) -> Platoon Qualification (CCTT, TOC) -> Platoon Live Tables (8-10)
- -> Company Gates (CCTT/STC, TOC) -> Company Qualification (CCTT/STC, TOC) -> CTC Rotation Live





**Gunner Station** 

Commander Station

# Background

### **Expectation:**

**Unlimited** Simulator time in **Multiple** gates in a **Customizable** firing range with **Selected** weather patterns for **all of your crews** during **Normal Business Hours** several weeks ahead of live fire days.



### Reality:

Your crews are scheduled from 18:00 – 04:30 because there's a VIP conference being held at the simulations center so you're not able to use it during the day, half of their machines are broken, the contractors are always late or in a bad mood or both, and it's going into a four-day weekend that you have to train through because its to only time available for the Sim Center and the Master Gunners. And your tank is deadlined with no parts ordered.







### **Motivation**



- 1. Increase training time and GST repetitions
- 2. Capitalize on younger generation and video-games experience
- 3. Maximize time available with minimal government overhead or support
- 4. There is enough already going on with gunnery...how can we simplify some of it?





"Tower 92" Facilitator



**AGST & C-AGST** 



#### **SABOT-X**

### Overview

"A gunnery skills and conduct of fire training [platform for]

vehicle crews anywhere at any time on any device..."

- Solves the issues with scheduling and supporting simulators
- Crews can train on their own time or decentralized
- 'Hip-Pocket Training' opportunity
- Supports chair drills and sequence commands
- More engaging that some traditional simulators

Provides realistic gunnery and training scenarios

Can be partial or full crews

Helps augment actual simulator time, ensuring more time spent training and less time retraining and re-orientation

Helps reinforce tactical decision-making, vocal commands, and target acquisition techniques









### SABOT-X Mobile App Screenshot Gunner Primary Sight (GPS) View





**CCTT Simulator GPS view** 



Real Life GPS view with Primary Fire Control

Switchboard



# **Military Application**

**Vehicle Crew performance:** develops muscle memory and immersive experience

**Reduces Risk and Cost of Training:** less simulator time, less retraining out at ranges, maximizes opportunity training with minimal resources

**Data-Driven Results:** tracks individual and crew performance rates and provides feedback similar to a real gunnery exercise, does not require a Master Gunner

**Adaptable and Mobile**: flexible artificial environment to simulate current or future training/war terrain and threats, customizable threat scenarios, can help ensure less "game-isms" and more realistic reaction, proactive development



## References

https://www.defensenews.com/land/2024/10/14/mobile-app-gives-armor-soldiers-a-training-simulator-in-their-pockets/

https://apps.apple.com/ph/app/sabot-x/id6612030769

https://www.moore.army.mil/mcoe/g3/Sims.html

