



## Training ASE Stimulation Suite – Virtual TASS-V

Inter-Coastal Electronics (ICE) provides training, instrumentation and network infrastructures to enable customers to train at Combat Training Centers or at their 'home station' Local Training Area (LTA). This paper focuses on and evolution of TASS identified as Training Aircrew Survivability Equipment (ASE) Stimulation Suite Virtual or TASS-V.

TASS is a complimentary training system to ICE's Tactical Engagement Simulation System (TESS). TESS is focused on weapons training, with or without live rounds, while TASS trains crews on their ASE systems. TASS emulates the ASE when within threat acquisition and engagement ranges, requiring pilots to take appropriate actions for peer/near-peer threat avoidance. The emulated ASE triggers the correct audio/visual cues to the aircrew, and inventories and decrements Chaff and Flare countermeasures. TASS is a critical capability allowing aircrews to train ATM 2800-2900 series tasks to standard. TASS replicates enemy Integrated Air Defense Systems (IADS) threats by providing interrogation, tracking and targeting of aircraft participating in combined arms Force-on-Force (FoF) training at the US Army National and Joint Readiness Training Centers (NTC and JRTC).

TASS-V offers a significant increase to train these critical tasks in local training areas and is not tied to a CTC or HITS site. TASS-V enables users to be stimulated by virtual air defense threats anytime, anywhere, providing live, in-aircraft ASE emulations with or without tactical ASE B-Kit hardware, sensors or comparators installed. TASS-V is an evolution of the currently fielded radio, range-based TASS. TASS-V can present realistic long range threats with the ability to detect aircraft beyond radio transmission



range, hundreds of kilometers away. Like TASS, TASS-V uses the US Army ASE B-Kit Emulator (ABE) Common Threat Database. TASS-V does not alter on-aircraft TASS hardware or software, but replaces Ground Threat Emitters (GTE) with a similar radio that transmits user-selected ABE threat types and grid locations, and can be operated under currently approved AWRs for UH60, CH47 and AH64 aircraft. This approach enables realistic, doctrinal Threat Integrated Air Defense System (T-IADS) arrays that Army Aviators can train against at the CTCs and LTAs.

Virtual threat scenarios can be loaded via COTS laptop running the TASS-V Threat Loader and relayed to the transmitting radio. Aircraft are searched, acquired, and engaged the same way TASS does today. TASS-V simply replaces the GTEs with a user programmed set of virtual threats. These virtual threats can be programmed to work independently or in an integrated manner.

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