RADIOCOMMUNICATION PRODUCTS AND SOLUTIONS

SYNAPS

Accelerating Collaborative Combat
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**Accelerating Collaborative Combat**

**OPERATIONAL REQUIREMENTS**

On modern battlefields, Forces need to increase the tempo of the maneuver. Fastest cooperative engagement calls for a superior communication, command, control and information radio system. From tactical edge to command-posts, everyone needs to focus on their mission while expecting the right information at the right time. Battlefield tactics define on short notice some ad hoc operational Communities of Interest that gather a variety of members who traditionally belong to different communication networks. Bridge the gap, avoid gateways, accelerate hierarchical AND transverse collaborative communications are the operational requirements.

**THALES SOLUTION: SYNAPS**

**SYNAPS Networking Capability**

SYNAPS radio network scales with ease: from small and highly capable special forces up to complete brigade deployment. SYNAPS networks land combined arms, army helicopters, as well as airborne and naval assets, breaking operational silos. All SYNAPS radios provide the warfighter on the battlefield with unique extended operational range and connectivity thanks to advanced radio protocols and excellent radio performances. SYNAPS also connects natively NATO and coalition forces in an optimized and secure manner.

**SYNAPS Multi-Service Capability**

From Order of Battle to mission success, combat voice, BFT (Blue Force Tracking) and situation awareness, chat, SMS, images and video are distributed simultaneously in perfect time to relevant members of the SYNAPS unified network. Security is end-to-end without deciphering between nodes. Ease to use, mission planning is fully automated and does not require complex training or additional manning, while network operation is simple and easy for the warfighter.

**SYNAPS-V**

2-channel V/UHF SDR tactical broadband radio node 50 W, with integrated high performance co-site filters and agile SIMO UHF wideband for longer range, in a compact format for easy vehicular integration.

**SYNAPS-H**

Lightweight V/UHF handheld SDR broadband radio for dismounted commanders. A backside mission module provides a potential extra capability if needed (ISR, soldier, TAC-SAT...). A 50 W booster and docking station is available for light vehicles.

**SYNAPS-A**

Airborne SDR SCA radio for any types of aircraft, including support of ground maneuver with CAS fighter (Close Air Support) and CCA (Close Combat Attack) with army helicopters.

**SYNAPS-WAVE**

Waveform library supporting a set of interoperability (NATO, COAL) and advanced networking waveforms. The most unique ones are MANŒUVER waveforms providing the users with collaborative combat capabilities over VHF and UHF wideband networks.

**SYNAPS-X**

A small computing platform transforming an existing F@stnet VHF station into a SYNAPS capable radio without the need to retrofit the vehicle. It protects the customer’s previous investment while providing a smooth transition path towards SYNAPS network and services.

**SYNAPS-EASY**

Simple and automated mission planning tool. Based on Order of Battle and information exchange requirements, it generates automatically frequency plans, keys, IP addressing plan, Communities of Interest for SYNAPS radios. No need for expert or additional manning.