REAL TIME LOCATION SOLUTIONS FOR SPECIAL FORCES AND LAW ENFORCEMENT TRAINING

Momentum Aerospace Group | Zebra Corporation | RSC | APX Labs

Benefit	***ROI Opportunity***
Spend training dollars more efficiently	• *Reduce money spent on ineffective training* • *Increase instructor efficiency*
Increase training effectiveness/ shorten the training cycle	• *Improve immediate training feedback to students* • *Capture performance for later individual, team, and instructor review*
Improve safety	• *Track and monitor students*
Helps agencies make better decisions	• *Reduce capital costs by investing only when objective performance data supports the investment* • *Provide feedback on training effectiveness that can*

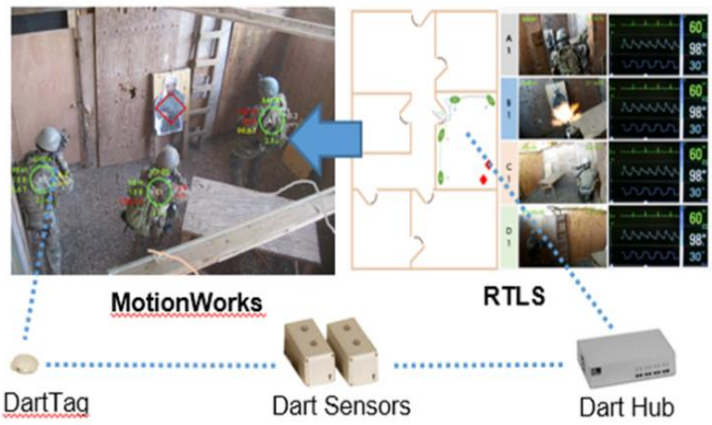
Executive Summary

After learning of the complimentary capabilities of two companies, **growth**[period] developed the idea of partnering Momentum Aerospace Group (MAG) and Zebra Technologies, to create TEAMWorks - a collaborative effort of MAG, Zebra Technologies, with assistance from Renaissance Sciences Corporation and APX Labs - that delivers a real-time performance intelligence solution to enhance decision-making during training and operations. TEAMWorks has copious applications for a variety of customers, but **growth**[period] suggested first bringing this to the Special Forces market, as a way to enhance their training effectiveness. This special effort was labeled as Real Time Performance Intelligence (RTPI) due to the volume and type of information TEAMWorks technology could provide instructors and their pupils.

Example of how the live video feed provided by RTLS could be used by instructors for training purposes.

MAG is an operational Intelligence Surveillance and Reconnaissance (IRS) company with a large Federal and International clientele base, who now provide the analytics and use-case scenarios for RTLS systems for multiple purposes within a variety of communities on behalf of Zebra Technologies.

Zebra Technologies is the world's leading supplier of RTLS technology, who wished to expand their presence within the Federal market. RTLS is considered the next step in the evolution of Active RFID, although it includes more than just RFID technology. RTLS is based on proven technology used by the manufacturing, health care, and professional sports industries to instantaneously track critical components and people in real-time as they relate to one another and view these locations in active movement via multiple devices.



The various components which comprise an RTLS system that has been deployed for training purposes.

Customer Challenges

After signing an exclusive teaming arrangement, **growth**[period] procured a live demo for MAG and Zebra with the 20th Special Forces Group (20th SFG) of the Army National Guard to showcase their RTLS system. **growth**[period] believed the 20th SFG could use such technology to increase their training capabilities while reducing their overhead costs. In addition to increasing training effectiveness, RTLS replay and performance measurements can provide objective feedback to both the instructors and their students, which improves the overall learning experience. When coupled with analytics to create RTPI Systems, an organization such as the 20th SFG can remotely and unobtrusively track and record real-time information related to human performance and the training

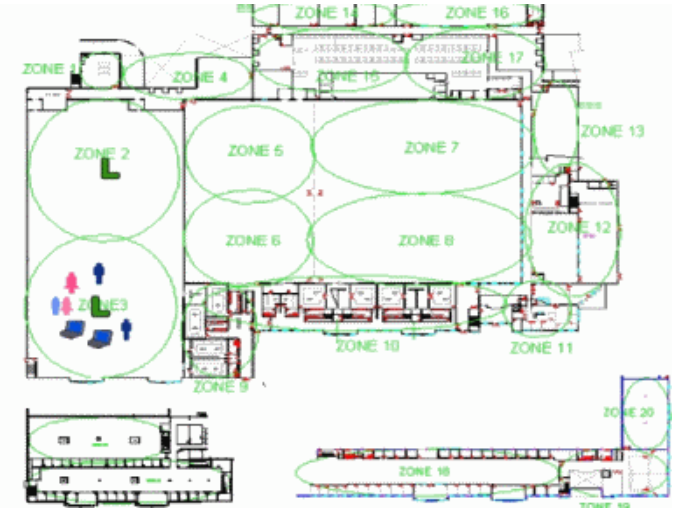
environment. The data that RTPI Systems can provide includes:

- Precise location and orientation of all students and other role-players.
- Location and orientation of objects such as pistols, rifles, and stun grenades.
- The state of a training facility such as open or closed windows and doors.
- Bio-signals including respiration and heart rate.
- When coupled with an appropriate weapons system (live or simulated), shots fired and shots on target.

How the Product Helped

Ultimately, RTPI allowed the 20th SFG to simplify the tracking of personnel and key equipment during active shooter training and reduced the administrative burden involved in conducting after action reviews with training participants. In turn, this increased the situational awareness of commanders with their training units.

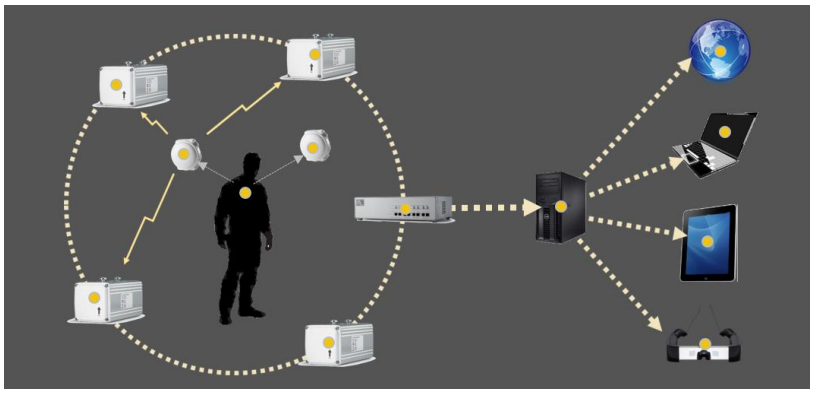
The database created from the information and analytics that were captured produced a rich archive of performance information that can be used to continuously improve individual and team performance. It can also be used as an historical reference for future training operations.



Example of how the live feed can be overlaid to the blueprint of a building and/or training area to provide more analytics.

Future Plans

With **growth**[period]'s assistance, MAG is targeting new customer bases with tangential requirements, such as the Federal Law Enforcement Training Center (FLETC) and Department of State's Bureau of International Narcotics and Law Enforcement. **growth**[period] is also increasing the "brand awareness" of MAG as a global situational awareness provider through technology such as RTLS and RTPI systems. In addition, **growth**[period] assisted MAG in obtaining GSA contract vehicles through which the government can now procure their services.



Visual highlighting the process of how RTLS technology can capture and transfer key information to numerous devices, including wearable technology.

For more information on the success of TEAMWorks, please see the article, **Virginia Startup Offers RTLS Solution for Live Shooter Training**, featured in *RFID Journal*: http://www.rfidjournal.com/articles/view?14022