Air Weapon Scoring System (AWSS)

The Air Weapon Scoring System (AWSS) is designed for determination and instant feedback of the impact point of bombs, rockets, and strafing runs conducted by military aircraft. The system's design makes it easy to use and maneuver via trailer mounted equipment and man portable units. All the equipment is deployed using the minimum of personnel.

The trailers can be deployed safely away from the target area and can be quickly moved for different target blast radii. The strafing sensors are deployed behind berms and can be rapidly positioned from their transit cases. An operator located within 5 km controls the operation of the scoring system and can relay the results directly back to the pilot and command staff. All results are collected and stored within the database for training and review.
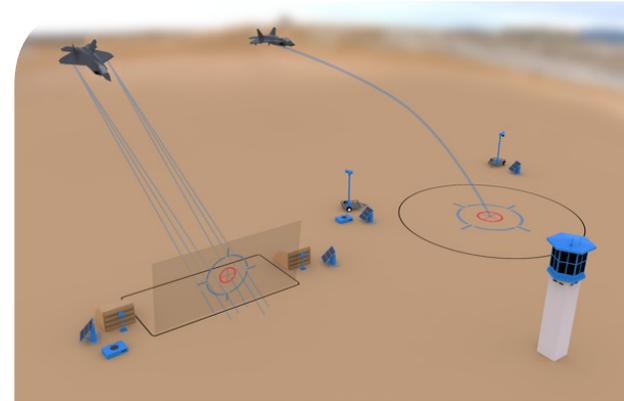
The system consists of a sensor array which detects the shock waves generated by supersonic projectiles, these are received by a sensor array, amplified and fed into the Target Processor. The Target Processor unit relays the sensor information via a data radio link to a scoring system in the control tower where the coded signals are transformed for display, storage on a database and printing.

After trailer placement, a semi-automatic calibration routine is run. Then the operator can adjust each camera and zoom in to cover the target bomb area.

The video from the high definition cameras is securely transmitted to a central control point where the operator views the scenes on a single split screen monitor or dual monitors. Specially designed image processing software will detect and triangulate the impact points, and return fast feedback on the impact GPS coordinates to a remarkable degree of accuracy. Both live rounds and practice rounds that generate video signal (smoke or ground burst) can be detected.

The entire system accurately computes the real-world position of the impact and displays it to the operator, logging the point of impact and flight characteristics whilst storing the displayed data. All data is then retained for review later. A short clip of the impact video on the bomb court is also logged for future analysis.

AWSS is a partner system to the system to the Mobile Artillery Scoring System (MASS) which provides a fully mobile capability to detect the impact points for artillery shells, AFV rounds and rockets. The addition of the camera/video solution provides the complete Weapons Scoring System.

FEATURES & BENEFITS

- Accurate impact point detection
- Secure wireless transmission of data
- Enables pilot to interactively train for ground attack
- Utilizes real earth coordinates of impact point
- Automatic scoring with manual override
- Small sensors for ease of protection
- Ability to run on solar power or battery back-up enable remote use
- Training mode with simulated impacts

ADDITIONAL INFORMATION

For an in-depth overview and video about the Air Weapons Scoring System, please visit our website!