



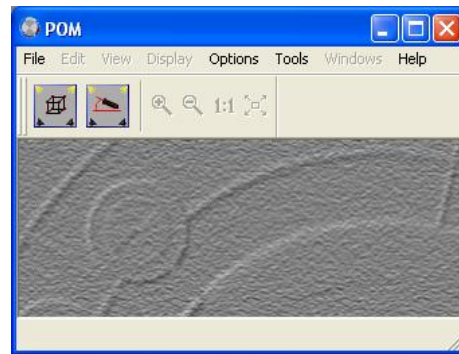
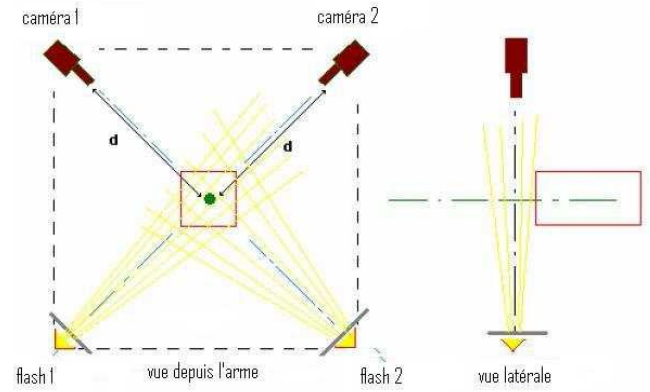
## APPLICATIONS

# TrackEye POM Bullet Orientation

The POM module is a stand-alone software module based on TrackEye/TEMA functionality.

The objective is to measure the impact angle(s) and 3D position of a bullet approaching a target.

Two cameras, opposed by flashes, are placed at right angles in a measuring construction approximately 1m\*1m.



The user interface is designed to be easy to use and allow for short turn-around between consecutive tests. The cameras are triggered to simultaneously create and capture one shadow image for each view of the approaching bullet.

### Requirements

To be able to fulfill a POM session the following data and images must be available:

- A pair of images showing calibration object
- At least one pair of images showing bullet approaching target
- Input text file with general test data
- Input text file with calibration object coordinates

### Procedure

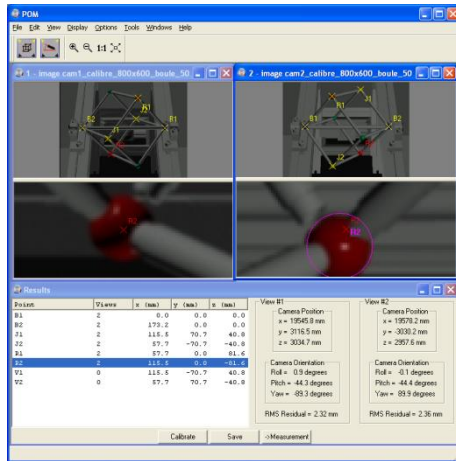
The operation is divided in two steps

- Calibration
- measurement



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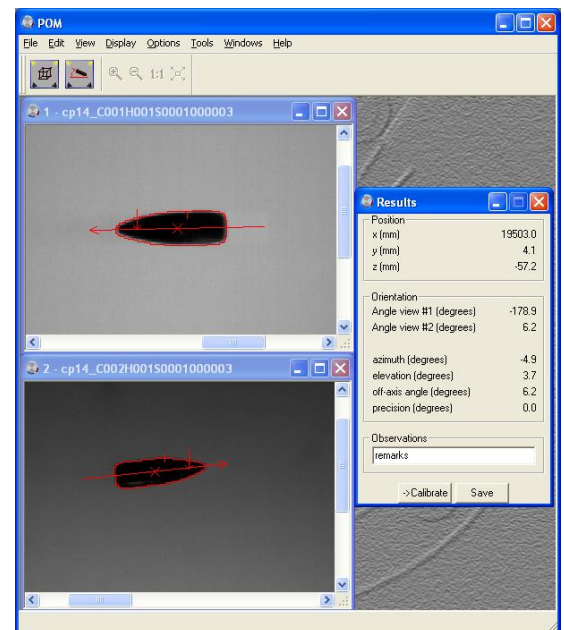
## Calibration

Prior to the tests the position and orientation of the cameras must be determined. This is achieved by a calibration object placed in the field of view for both cameras. The operator identifies points on the calibration object.

## Measurement

When two new images are available the operator clicks on the bullet in each view. The bullet is automatically outlined and the result is presented. Pressing save writes data to the output log file.

System is ready for another repeated test.



The output is typically the position and the absolute angle relative to the trajectory axis.

### TrackEye software modules required

- TrackEye POM

Analysing bullet approach at a military test range has to be very efficient.

The TrackEye POM is the perfect tool.

