

We recently completed the successful installation of an IMAGO Portable Optical Tracking System at the Saab Bofors Test Center in Karlskoga, Sweden.

The system consists of a pan/tilt unit and tripod, upon which are mounted two visible-light digital cameras with lenses. These cameras are designed to acquire high-speed airborne targets and feedback video data at 60 Hz to the IMAGO software video tracker. Once acquired, targets can be tracked by selecting one of IMAGO's video tracking algorithms and the system has the ability to automatically select and track explosion fragments, leading and trailing edges, or follow pre-programmed routines through the "Timeliner" event-driven script input. The system also has the ability to follow pre-programmed ballistic trajectories to aid in the acquisition of high-speed targets.



The IMAGO Tracking System is installed on the pre-surveyed location (above). The tracking system allows for input of survey data in both Cartesian NEU or WGS84 formats.

The pan/tilt also contains a high-speed digital camera and optics with the ability to be triggered independently. It is used to look closely at specific events in higher speed than is available with the tracking cameras. In addition, a long range MWIR camera is also provided, the system is fully integrated into the video tracker and can be used either as another tracking video input or as a bore-sighted sensor for thermal measurement of the target. The optical payload is contained in a temperature-controlled enclosure, which allows the tracking mount to be left deployed in all weather conditions if required.



The camera enclosure contains digital tracking cameras as well as a high-speed camera (above). The IR camera is shown on top of the camera enclosure and the entire payload is mounted over the centre of rotation to eliminate off-axis parallax errors.

Successful Installation of an IMAGO Portable Optical Tracking System at the Saab Bofors Test Center cont'd

The man-machine interface consists of a rack-mounted industrial PC unit for control of the pan/tilt and video tracker, plus a second unit, which houses a mission recording and analysis system. The operator's GUI is designed for ease of use and the system with mission recorder can be controlled by one operator.

If you would like to know more about the Saab Bofors Test Center and the capabilities they can offer with this system, please visit their website:

<http://www.testcenter.se>.



The rack-mounted PC units house the tracking PC and GUI, and the mission record and analysis system (above).



Welcome to IMAGO NEWS. Each edition features a specific aspect of IMAGO's video tracking work. Sometimes we address a particularly difficult video tracking problem; other times, a new product or an upgrade for your existing IMAGO systems.

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If you have questions suitable for newsletter publication, or to find out how IMAGO can help with your specific tracking or measurement problem, please contact:

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For a wider look at IMAGO's capabilities, go to:

<http://www.imagotrackers.com>.

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