



B145 Battlefield Forensics and Homeland Security

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The goals of this presentation are to provide an overview of forensic forward needs; to illustrate forensic applications in intelligence and implementing the rule of law; to illustrate how cooperative efforts between NIJ and DoD can benefit both the traditional forensic disciplines and homeland defense; and to propose a future view of how forensic science roles may be evolving.

This presentation will impact the forensic science community by demonstrating how deployable forensic and technical intelligence capabilities are directly applicable to homeland security needs.

Traditional forensic examinations are used in Iraq to track and identify bombers and snipers as the multi-national forces combat insurgency. This forensic effort includes examiners on the ground in-theater as well as reach back to capabilities in the United States. The forensic data has a range of uses from tactical forensic intelligence to support in establishing the rule of law and prosecutions in various judicial courts. Forensic analyses have been so successful that it is likely that wherever U.S. troops deploy in the future, forensic capabilities will be part of their skill set.

Unique in-theater needs drive unconventional solutions for how examinations are conducted and the types of equipment used. The U.S. Army Criminal Investigation Laboratory (U.S.ACIL), the National Forensic Science Technology Center (NFSTC), the Defense Threat Reduction Agency (DTRA), and the National Institute of Justice (NIJ) are partnering in the development of a deployable laboratory solution. In a joint DTRA-NIJ supported effort, the NFSTC leveraged this concept to develop deployable laboratories capable of augmenting traditional forensic facilities: (1) to provide a temporary addition of laboratory workspace, (2) for surge capacity to reduce backlogs, or (3) to provide a resource during crisis events (e.g., Katrina; World Trade Center).

The laboratory design provides the unparalleled ability to deploy virtually worldwide within a matter of hours, rather than days or weeks, with set up and full functionality within hours of reaching a disaster area. The deployable laboratory infrastructure is capable of delivering analysis results ranging from preliminary/presumptive tests to the absolute identification of materials. This portable forensic laboratory can be equipped to house conventional forensic applications such as DNA analysis, firearms examination, drug and toxicology testing, and serology within a certified ISO container; a shelter structure would function as an administration/communications sector. Features of the laboratories will be illustrated in the presentation.

As opposed to domestic use, the forensic capabilities of the laboratory deployed in support of the warfighter bring new challenges to the forensic community. Customer requirements range from providing immediate preliminary results to producing a "bulletproof" laboratory report for use in U.S. judicial proceedings. Traditional crime scene approaches and chain-of-custody methods cannot be transferred directly to the field. The required adaptations prompt a number of questions regarding implementation. How do procedures and protocols need to be adapted? Can traditional forensic staff make this adjustment? What staffing model supports this need? What is the impact on the accreditation of an agency providing these services? This presentation will outline some of the paradigm shifts needed to properly support the warfighter.

Warfighter, Technology Transfer, Forensic Intelligence