Forensic Support Across the Full Spectrum of Operations

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DoDD 5205.15E, Defense Forensic Enterprise

SECARMDY is responsible for the synchronization of forensic activities and stakeholders into one comprehensive community of interest, community of action across the DoD
Forensics Supports Full Spectrum Operations (FSO)

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<td>Deter the Enemy</td>
<td>Seize the Initiative</td>
<td>Dominate the Enemy</td>
<td>Stabilize the Environment</td>
<td>Enable Civil Authority</td>
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<td>• Host Nation Training</td>
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<td>• Build Civilian Capacity</td>
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• Joint Ops Planning
How Forensics is Applied

Before the processes are performed, material (evidence) must be recognized...then the Forensic wheel begins to turn.

The linkages formed throughout the forensic wheel produce information that feeds the five outputs. Linkages may be almost instantaneous, depending on the forensic discipline and technology.

Forensic processes in which Soldiers, Sailors, Airmen and Marines have the most influence include Recognize, Preserve, and Collect---Level I Training is critical to JEFF success.
CURRENT OVERVIEW JEFF 7, CAMP LEATHERNECK, AFGHANISTAN, Support to RC(SW) Operations

Slides By: MAJ (USA) Erik Archer, JEFF 7 OIC
Operational JEFF Labs in ATO

JEFF CAPABILITIES
- DNA
- Latent Print
- Forensics Photography
- Firearm/ Tool Marks
- Forensic Chemistry
- REACHBACK TO USACIL

JEFF 5
Bagram AB
Supports RC North, East, Capital

JEFF 6 (USACIL)
Kandahar AB
Supports RC South, Southwest

JEFF 7
Camp Leatherneck
Supports RC West, Southwest

RC-N
RC-C
RC-W
RC-E
RC-S
RC-SW
Forensic Training Capability in ATO

1. MOI Central Crime Lab/ 89 PAX
   Latent Prints, Firearms/Ballistics, Questioned Documents, DNA, Explosives Analysis, Biological Analysis/Biometrics
   Located at MOI HQ in Kabul

2. JCIP Training Facility/ 28 PAX
   Latent Prints, DNA, Firearms/Tool marks, Questioned Documents
   Construction start: 5 APR 11
   ECD: JUL 11

3. Khost Regional Lab/ 25 PAX
   Latent Prints, Firearms/Tool marks, Questioned Documents
   ECD: 2011

4. Kandahar Regional Lab/ 25 PAX
   Latent Prints, Firearms/Tool marks, Questioned Documents
   ECD: 2011

5. Mazar-e-Sharif Regional Lab/ 25 PAX
   Latent Prints, Firearms/Tool marks, Questioned Documents
   ECD: 2012

6. Jalalabad Regional Lab/ 25 PAX
   Latent Prints, Firearms/Tool marks, Questioned Documents
   ECD: 2012

7. MOI Central Crime Lab/ 89 PAX
   Latent Prints, Firearms/Ballistics, Questioned Documents, DNA, Explosives Analysis, Biological Analysis/Biometrics
   Located at MOI HQ in Kabul

8. JEFF 5 BAF/ 20 PAX
   Latent Prints, Firearms/Tool marks, DNA

9. JEFF 6 KAF/ 14 PAX
   Latent Prints, Firearms/Tool marks, DNA

10. JEFF 7 Camp Leatherneck/ 17 PAX
    Latent Prints, Firearms/Tool marks, DNA, Forensic Chemistry

11. JEFF 8 Camp Stone/ AUG 11
    DNA
Forensics to Kinetics

BLUF: Fully invested in the forensic process, Marines submit evidence to JEFF 7 as a matter of routine. JEFF 7 is the busiest lab in Afghanistan (and Iraq) and received 426 cases in June.

JEFF 7 provides Regional Command SW with DNA, latent prints, chemistry and firearms forensic exploitation capability.

JEFF 7 processes captured enemy materials and translates this hard scientific data into usable information or forensic outputs that are critical to the tactical and operational decision making process.
Forensics to Kinetics Process

Evidence Collection

Units in RC(SW) collect enemy material (IED components, drugs, explosives, weapons, caches, and biological evidence) and transport to JEFF 7 for forensics analysis.

JEFF 7 Analysis

JEFF 7 scientists analyze the evidence and provide results within 24 hours for red cases. Any single case can be exploited by one or all four sections. An enemy AK-47 for example would be processed by latent prints, DNA, and firearms.

Forensic Output / Kinetic Action Result

The JEFF 7 Intelligence Analysts are co-located with the RC(SW) Biometrics Manager and the C2-Exploitation Chief in the Exploitation Fusion Cell (EFC). Combining forensics and intelligence analysis, the EFC provides intelligence analysis of forensic results, creates threat networks, and creates for the warfighter easily digestible products such as a Technical Intelligence (TECHINT) Bulletin and an Exploitation Support Package (ESP) that details the forensic output, intelligence
Latent Prints Section

Evidence Collection
Marines discovered a cache on 12 March 2011 containing a variety of weapons and Taliban documents. The items were collected and transported to JEFF 7 for analysis.

JEFF 7 Analysis
Through latent print analysis, 980 fingerprints were identified and uploaded to the common database. The database search revealed six matches to known individuals.

Forensic Output / Kinetic Action Result
Five of the six individuals were added to the Biometric Watchlist Tier 2. The other individual was detained and the results were provided to the detainee’s case manager and interrogator to assist in the prosecution package and questioning. The information will be used to question the detainee on specific terrorist networks in RC(SW) and eliminate intelligence gaps. The forensic analysis aided directly both prosecutorial and intelligence efforts.
Firearms Section

Evidence Collection

On 4 May 2011, Marines were engaged with an unknown heavy machine gun. After the engagement, the Marines collected and transported the expended rounds and casings to JEFF 7.

JEFF 7 Analysis

Firearms microscopic analysis identified the round caliber as 14.5 mm and the weapon as a unique and significant weapon.

Forensic Output / Kinetic Action Result

JEFF 7 provided the operators with the weapon information and type. The Marines then deliberately searched for, identified, targeted, and attacked the lethal heavy machine gun. Forensics analysis translated directly into kinetic action destroying a key enemy asset.
Evidence Collection

In March 2011, an individual provided Marines with materials he collected from a suspected enemy compound. Unaware of what the material was, Marines submitted it to JEFF 7.

JEFF 7 Analysis

Through chemical analysis, JEFF 7 identified the evidence as containing compounds consistent with homemade explosives.

Forensic Output / Kinetic Action Result

Being informed that the unknown material was in fact homemade explosives, Marines conducted a targeted operation on the compound resulting in the discovery of enemy explosives and weapons. These were removed from the battlefield and as a threat to coalition forces in RC(SW).
Evidence Collection

Closing over 1,000 cases since November, the DNA section is provided IED components and weapons to identify and process enemy DNA.

JEFF 7 Analysis

In one particular enemy network in RC(SW), the DNA section identified 32 different DNA profiles from enemy IED components. Within this single network, analysts identified one known individual and 12 unknown individuals.

Forensic Output / Kinetic Action Result

The network ties created by DNA linkage exposed a combined IED network with 18 known and unknown individuals. Within this network responsible for multiple coalition forces casualties, the DNA analysts and EFC provided information leading to a Joint Prioritized Engagement List (JPEL) nomination. The identifications were provided to units in the area of operations IOT capture/eliminate them from the battlefield.
At the End of the Day---

- JEFF 7 provides a critical component to and is fully-integrated in the RC(SW) operations
- JEFF 7 denies the enemy anonymity and enables targeting, prosecution, sourcing, force protection, and medical related forensic outputs
- JEFF 7 is an enabler to the RC(SW) exploitation process and with the creation of the EFC, hard science is translated seamlessly into information used for full-spectrum operations
Expeditionary Forensics Tomorrow

Transition of JEFF to Expeditionary Forensic Laboratory (EFL) Program at US Army Criminal Investigation Laboratory (USACIL), Ft Gillam, GA

- Expeditionary Forensic Division (EFD) established
- JEFF programs transitions from program management at NSWC Dahlgren to USACIL
- Deployment of GS personnel augmented with contractors

R&D at USACIL develops new capabilities

OPMG/USACIDC/USACIL working with HQMC, PP&O, PS Division to ensure Marine Corps Expeditionary Forensic requirements are maintained
Why the EFL?

Expeditionary Forensic Lab Structure

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<th>EFL Forensic Science Capabilities</th>
<th>EFL HQ Elements</th>
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<td>DNA Analysis</td>
<td>HQ (Chief, OPS, Lead Scientist, EC)</td>
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<td>Latent Print Analysis</td>
<td>Logistics</td>
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<tr>
<td>Firearms/Tool Marks Analysis</td>
<td>IT</td>
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<tr>
<td>Chemistry</td>
<td>Maintenance</td>
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- 3x EFLs in the Expeditionary Forensic Division.
- Each EFL can support up to 3x locations or individual disciplines can be deployed independently of the whole.
- 40x personnel in each EFL (20x are forensic scientists).
- Primary forensic force provider for DoD, includes robust reachback operations.
- Flexible, responsive to JFC’s priorities including ship-to-shore requirements.
- Capable of supporting all forensic outputs: targeting, sourcing, medical, force protection, and prosecution.
- Designed to accept modular components from other disciplines such as DOMEX, Triage, Explosive Chemistry, EE, etc. tailored to fit the requirement.
Support to Homeland Security
What We Do Matters but...

**WHO:** Waad Ramadan Alwan, an Iraqi refugee, entered the US legally in 2009.

**WHAT:** Charged in 2011 with conspiracy to kill a United States national, conspiracy to use a weapon of mass destruction, and attempting to provide material support to terrorists.

**WHERE:** Bowling Green, Kentucky

**WHEN:** MAY 2011

**HOW:** Fingerprints were lifted from an unexploded IED in 2005 and subsequently loaded into the DoD database. Database was not available to DoH until 2010 at which time DoH began rescreening refugee data with the DoD database. Alwan’s fingerprints in DoH database matched the ones found in the DoD database originally from the IED.

**WHY IS THIS IMPORTANT:** Highlights the importance of forensic science to both the fight downrange and force protection and anti-terrorism efforts within the US borders. BUT...also highlights how critical it is for government agencies to share relevant data and ensure cooperation of effort.

**FUTURE PREVENTION:** DoD and DoH have signed an MOU authorizing the sharing of certain biometric data. DoD and DoJ have similar agreements WRT fingerprints and DNA.

Mission & Manning

Mission: Manage and direct all forensic-related issues and programs for Headquarters Department of the Army, Office of the Provost Marshal General (PMG) in its execution of a unique national-level forensics program supporting DoD, interagency, and allied customers.

Branch Chief – Mr. John Manson (GS-15)
Deputy – MAJ Jennifer Schroeder
Senior Analyst – Mr. Scott Brauner (Ctr)

Major Programs

- Expeditionary Forensics:
  - NIEF (JUONS 404): Lab in CENTCOM AO with TEYE partners.
  - AFRICOM: USACIL conducting assessment
  - EXIT (JUONS 474): CEXC support to OND through 31 DEC 11
  - EFL/JEFF: EFL transition in AFG beginning SEP 11

- DODD Defense Forensics Enterprise (DFE): Establishes the Army as the DoD Executive Agent for forensics (minus technical chem/nuclear forensics). SECARMY likely to designate PMG as the Responsible Official (RO) for forensics programs and policy.

Current Issues

- Development of Forensics Strategic Engagement Plan (SEP & Transition from OCO funded “ad hoc” expeditionary capabilities to funded and BASE Program of Record)

- Working ICW USMC to develop MAGTF Expeditionary Forensic Capability– IdOps Strategy and Implementation Plan

- USD (AT&L) sponsored Defense Forensic Enterprise Architecture(s) and Defense Forensic Network (DFN) projects

As of: 13 July 2011
OPMG Forensics Branch POC

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