Interdisciplinary – Post Blast Investigation
I-PBI-1 & I-PBI-2
Schedule

Day 1: Range day.
Day 2: Morning classes on:
- 3D Laser Scanning
- Digital forensics
- Forensic Pathology
- Tool marks examination
- Rules of evidence

Days 3 & 4: Laboratory processing with hands-on classes:
- DNA: Sampling, testing, and Rapid-DNA
- Chemistry: Sampling, testing, and portable -v- bench-top equipment

Day 5: Case presentation to intelligence panel.
- Panel members: Federal prosecutor, TEDAC intelligence section chief, Army EOD O-6 former TF Paladin CO, Air Force EOD O-6 PE engineer, and forensics PhD
Training Areas
- Range
- Biometrics Lab (former Fire House)
- Chemistry Lab (general)
- Explosives Characterization Lab
- DNA Lab
- Classroom
Support
- Leica 3D Laser Scanner
- Team Bags:
  - Tarps, tables, sifters, hand-tools, metal detectors, camera, scales, gloves, shovels, etc.
- X-ray
- 908 Device
- Other general support equipment
Team 2
Team 2, Device and Scenario

Device:
- PVC pipe 2” x 16”, ¼ lb pentolite and ~1 lb ANFO
- 8 D-cell batteries in series (AF/IQ style)
- Pressure release switch with rock to hold
- ¾” nuts, 4 rows wide, 14” long
- Cell phone on facetime

Configuration:
- On the ground, being assembled via guidance on facetime when it functioned
Team 2

DNA Swabs from wire twists on battery pack

Fingerprint from duct tape, between layers on battery pack
Team 2

Fingerprint from tape

Note found at scene
“Joe I missed you here is your bag. Thanks”
• Power source: 8 D-cell batteries wired in series
• Micro switch
• White PVC pipe
• Hex nuts for fragmentation
Team 2
Team 3
Team 3
Team 4
Scene Overview
Blast seat, approximately 10” deep, 2 feet 6 inches wide.
Furthest piece of evidence recovered 200 feet from blast seat
Team 4
Team 4

Diagram of electrical circuit recovered from vehicle after anonymous tip
Team 4, DNA Recovered
Team four swabbed the project box for DNA sampling and recovered two positive matches linking Tom Smith and Matthew Jones to the item.
The Future

Level 1:  Increase forensic training to operational personnel

Level 2:  Continue to develop and implement scientific techniques applicable to processing post blast debris

Level 3:  Continue to develop and implement effective means of conducting forensic exploitation, identify bomb-maker signatures and sources of supply for all theaters, and disseminating time-sensitive information to those in harms way
Questions?

Tom Gersbeck
Office: 918-561-8464
Tom.gersbeck@okstate.edu