CRM LESSON PLAN REPORT

UNIFIED ACTION ENABLERS
071-FREBB008 / 02.0 ©

Analysis
21 May 2013

Effective Date: N/A

SCOPE:

None

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SECTION I. ADMINISTRATIVE DATA

All Course Masters/POIs Including This Lesson

Courses

Course Number	Version	Title	Phase	Status
9E-F59/950-F38	02.0	Dismounted Counter-IED Tactics Master Trainer	N/A	Analysis

POIs

POI Number	Version	Title	Phase	Status
9E-F59/950-F38	02.0 ©	Dismounted Counter-IED Tactics Master Trainer	0	Analysis

Task(s) Taught(*) or Supported

Task Number	Task Title	Status

Reinforced Task(s)

Task Number	Task Title	Status

Knowledge

Knowledge Id	Title	Taught	Required
011-077K	Combat Skills (map reading, SERE, etc.)	No	Yes
011-791K	knowledge of combat support units assigned to the corps	Yes	Yes
071-OPN-0024	Combat Orders	Yes	Yes
K0121	Know the capabilities and limitations of a Tactical Combat Force	Yes	Yes
K0394	Understand the concept of combat multipliers.	Yes	Yes
K0174	Know the general types of combat forces.	Yes	Yes
K0481	Know to protect noncombatants located within your area of operation.	No	Yes
171-K0481	Know to protect noncombatants located within your area of operation.	No	Yes

Skill

Skill Id	Title	Taught	Required
ASAS15	Ability to employ the five combat multipliers.	Yes	Yes
011-077S	Ability to use Combat Skills (map reading, SERE, etc.)	No	Yes
011-723S	How to integrate combat service support plannning into the military decision making process	Yes	Yes
052-S-00010	Ability to Understand Verbal Instructions	Yes	Yes
S0805	Ability to Determine Grid Coordinates	No	Yes

Administrative/ Academic Hours

The administrative/academic (50 min) hours required to teach this lesson are as follows:

Academic	Resident Hours / Methods		
Yes	2 hrs	10 mins	Discussion (small or large group)
Total Hours(50 min):	2 hrs	10 mins	

Instructor Action Hours

The instructor action (60 min) hours required to teach this lesson are as follows:

	Hours/Actions		
	0 hrs	10 mins	Classroom Breakdown
	0 hrs	15 mins	Classroom Setup
Total Hours (60 min):	0 hrs	25 mins	

Test Lesson(s)

Hours	Lesson Number Version	Lesson Title
None		

Prerequisite Lesson(s)

Hours	Lesson Number Version	Lesson Title
None		

Training Material Classification

Security Level: This course/lesson will present information that has a Security Classification of: FOUO – For Official Use Only.

Foreign Disclosure Restrictions

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References

Number	Title	Date
ATP 2-22.85	BIOMETRICS MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR TACTICAL EMPLOYMENT OF BIOMETRICS IN SUPPORT OF OPERATIONS http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp2_22x85.pdf	01 Apr 2014
ATP 5-19 (Change 001 09/08/2014 78 Pages)	RISK MANAGEMENT http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp5_19.pdf	14 Apr 2014
DD FORM 2977	DELIBERATE RISK ASSESSMENT WORKSHEET	01 Jan 2014
FB (Safety) Form 385-1-E	Daily Risk Management Assessment Matrix	01 Oct 2013
FM 3-21.8	THE INFANTRY RIFLE PLATOON AND SQUAD	28 Mar 2007
FM 3-24 (Change 001, June 02, 2014)	INSURGENCIES AND COUNTERING INSURGENCIES http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_24.pdf	13 May 2014
FM 3-24.2	TACTICS IN COUNTERINSURGENCY	21 Apr 2009
FM 3-34.5	Environmental Considerations	16 Feb 2010
HIIDE SERIES 4	HIIDE Series 4 (Handheld Interagency Identity Detection Equipment) User Guide & Technical Manual	13 Oct 2006
HIIDE SERIES 4 (DM)	HIIDE Series 4 (Handheld Interagency Identity Detection Equipment) Device Manager User Guide	29 Jun 2006
SEP 243-ASI7D (96U10)	Student Evaluation Plan (SEP) for 243-ASIU2, Shadow RQ-7A UAV Operator	01 Feb 2006
SH 21-76	Ranger Handbook	02 Jan 2011
THOR III	Technical Manual, Operation and Maintenance With Parts Breakdown Organization Level for the THOR III System P/N 118600-001	29 Sep 2009

Student Study Assignment

Study for next day's assignment.

Instructor Requirements

Instructor must be Army Basic Instructor Course (ABIC) certified (or DOD equivalent). Dismounted Counter-IED Tactics Master Trainer (DCT-MT) Course, Combat Life Saver (CLS), Small Group Instructor Course (SGIC), Hand Held Device (HHD) Certification

Support Personnel Requirements

NONE

Additional Support Personnel Requirements

Name	Student Ratio	Qty	Man Hours
Bus Driver	1:30		1.5
Combat Lifesaver		1	2.0
NCOIC		1	2.0

Equipment Required for Instruction

ID - Name	Student Ratio	Instructor Ratio	Spt	Qty	Exp
2310-01-090-7709 - Bus Transit 44 Passenger	1:30	0:0	No	0	No
4110-01-485-3548 - Chest, Ice Storage, White, 162 Quart Capacity	1:15	0:0	No	0	No
5820-00-NSN - SCREEN, PROJECTION	0:0	0:0	No	1	No
5820-00-T93-6432 - PROJECTOR, VIDEO, LCD EPSON ELP33 WITH REMOTE	0:0	0:0	No	1	No
5860-01-363-8730 - Laser Pointer	1:15	0:0	No	0	No
5895-01-540-4543 - Computer, Laptop	1:10	1:3	No	0	No
6530-01-290-9964 - Litter, Folding, Rigid Pole	1:15	0:0	No	0	No
6545-01-532-3674 - Medical Equipment Set, Combat Lifesaver, Version 2005, UA 245A	0:0	0:0	Yes	1	No
6665-01-381-3023 - Wet Bulb-Globe Temperature Kit	1:15	0:0	No	0	No
6685-01-590-1047 - Monitor, Heat Stress: Questemp 44	1:15	0:0	No	0	No
6760-00-985-6749 - Tripod, Photographic	1:30	0:0	No	0	No
7021-01-C17-2297 - PC Tablet, Data Entry: Galaxy Tab 2 WIFI 16GB Samsung	1:1	0:0	No	0	No
7240-00-098-3827 - Can, Military	1:9	0:0	No	0	No

(Note: Asterisk before ID indicates a TADSS.)

Materials Required

Instructor Materials:

1. Lesson plan with Appendix A, C, and D as applicable
2. All references linked to this lesson plan
3. Visitor Book
4. Risk Assessment
5. PowerPoint lesson presentation

Student Materials:

1. Student disc
2. All references linked to this lesson
3. Pen/Pencil and note taking material

Classroom, Training Area, and Range Requirements

ID - Name	Quantity	Student Ratio	Setup Mins	Cleanup Mins
74046-0-0 Consolidated Open Dining Facility, 0 Square Foot, 0 Seats	1		0	0
44224-0-0 Organizational Storage Building, 0 Square Foot, 0 Cubic Foot		1:30	0	0
72114-0-0 Enlisted Barracks, Transient Training, 0 Square Foot, 0 Starting Point , Service Points, or Persons Supported	1		0	0
17120-M-1200-30 Classroom, Multipurpose, 1200 Square Feet, 30 Students	1		15	15

Ammunition Requirements

DODIC - Name	Exp	Student Ratio	Instruct Ratio	Spt Qty
None				

Instructional Guidance/ Conduct of Lesson

NOTE: Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

1. Have on hand identified reference materials linked to the lesson plan.
2. Review presentation and develop a list of questions to use during class.
3. Review and prepare conference/discussion material presented.
4. Ensure all equipment listed for this Lesson Plan (LP) is present, operable, and set up for use before class.
5. Refer to the practical exercise, Appendix C, of this lesson plan. When necessary develop additional situations to use during the practical exercise.
6. PowerPoint users: Ensure the Instructor's file has been called up using Microsoft PowerPoint Viewer and Instructor/slide 1 is displayed on the screen before class.
7. Whenever noted, slides are available to assist in explanation of task steps. Use slides as needed during class or practical exercise to reinforce training. The Instructor may choose to use/not use the LP SLIs as developed, modify the existing SLIs content/order or insert new material as is necessary based on audience analysis to assist in Soldier learning. Changes must be annotated as a pen/ink change on the vault file master LP, VIP LP, and Instructor LP.
8. Whenever necessary, ask leading questions of Soldiers in order to prompt Soldier discussion.
9. Most materials associated with this LP are provided to Soldiers in digital format loaded on their school issued CD and student handout unless stated within instructional notes. Instructor will have to issue all necessary materials to Soldiers in hard copy unless they have individual Soldier laptop/digital capability.
10. Encourage Soldiers to relate their first hand experiences during the activities.
11. Facilitate this lesson using Instructor's methodologies.
12. Control group activities using Instructor's techniques.

1. DURING INSTRUCTION

a. Follow the lesson plan, show and discuss slides as appropriate, and facilitate group discussion.

b. Ensure students stay attentive and pay proper military respect to senior officers, dignitaries, and/or guest speakers.

c. Ensure students take notes and actively participate in group discussions and stay focused on the lesson training objectives.

2. AFTER INSTRUCTION

a. Ensure proper police of classroom and other areas used by the students.

b. Ensure that no classified/sensitive material is left in the classroom.

c. Check classroom for security, cleanliness, and energy conservation before departing area.

d. Annotate FB Form 1087a, Instructor/Evaluator Comment Record as appropriate.

3. BEFORE USING EQUIPMENT

a. Ensure students are given a specific safety briefing, if necessary.

b. Perform proper power up/down procedures for computer equipment.

Note: The above examples in no way limit the safety precautions that the individual instructor/facilitator may stress. There may be specific instances during conduct of lesson that the instructor/facilitator may caution students about.

Proponent Lesson Plan Approvals

Name	Rank	Position	Date
None			NO DATA

SECTION II. INTRODUCTION

Method of Instruction: Discussion (small or large group)
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - ICH, ABIC/FIFC Qual and CIED SME (1:5)
Time of Instruction: 5 mins

Motivator

Slide 1: Introduction and Motivator

Knowing what combat enablers you have to use in your Area of Operations (AO) will significantly aid in the planning and execution of a Dismounted CIED operation as a DCT-MT Patrol Advisor.

Note:

1. Use this statement or develop one of your own relating to the material.
2. The motivator statement is in the note page of this slide.

Slide 2:

Terminal Learning Objective

NOTE. Inform the students of the following Terminal Learning Objective requirements.

At the completion of this lesson, you [the student] will:

Action:	Identify the Unified Action enablers available to dismounted C-IED planning and execution.
Conditions:	In a classroom environment, given a PowerPoint presentation, lesson plan, and current reference materials.
Standards:	Identify the Unified Action enablers IAW FM 3-21.8, FM 3-24 JIEDDO Smart book and must score of 80% or greater on examinations/rubrics and includes: 1. Identify Company level assets 2. Identify BN/BDE assets **Learning Domain:** Cognitive **Learning Level:** Knowledge
Learning Domain - Level:	None assigned
No JPME Learning Areas Supported:	None

Safety Requirements

Safety Requirements in a Classroom Setting:

Safety is of the utmost importance in any training environment. During the training process, commanders will utilize the 5-Step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken during the conduct of training. Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions.

Instructor note: The instructor will brief the students on the unit/facility SOP for classroom

contingencies (i.e. what doors will be used to exit the classroom, rally points, severe weather, WBGT/Kestrel set up, etc).

Safety Requirements other than Classroom Settings:

Safety must be paramount in the complex outdoor environment. During the training process, commanders will utilize the 5-Step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken while replicating realistic battlefield conditions. Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions. The instructor will brief the unit/site SOP and Risk Management Worksheet for all potential contingencies encountered during that training period/event (i.e. WBGT/Kestrel set up, trail vehicles for PT/foot marches, severe weather, fire, evacuation routes, muzzle awareness, range safety briefs, required medical FLA with driver and medics with emergency equipment, student injury procedures, and rally points etc).

Risk Assessment Level

Low - All Army Instructors will conduct a Risk Assessment Worksheet (FB Form 385-1-E, Daily Risk Management Assessment Matrix, OCT 2013) prior to training and brief Soldiers on identified hazards.

Assessment: The Principal Instructor will prepare a risk assessment using the before, during, and after checklist and the risk assessment matrixes contained in Risk Management FM 5-19.

Controls: See Attached FB Form 385-1-E.

Leader Actions: See Attached FB Form 385-1-E.

Environmental Considerations

NOTE: Instructor should conduct a Risk Assessment to include Environmental Considerations IAW FM 3-34.5, Environmental Considerations {MCRP 4-11B}, and ensure students are briefed on hazards and control measures.

It is the responsibility of all Soldiers and DA civilians to protect the environment from damage. There are no environmental concerns during this block of training.

Instructional Lead-in

Understanding Combat Enablers will enable you to make an accurate threat assessment to employ current dismounted equipment to counter the IED threat.

Note: Use this statement or develop one of your own relating to the material.

Slide 3: Enabling Learning Objectives

At the completion of this lesson, you will be able to:

1. Identify Company level assets
2. Identify BN/BDE assets

SECTION III. PRESENTATION

TLO - LSA 1. Learning Step / Activity TLO - LSA 1. Identify Company Level Assets

Method of Instruction:	Discussion (small or large group)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH, ABIC/FIFC qual and CIED SME (1:5)
Time of Instruction:	1 hr
Media Type:	Actual Equipment / Handout / PowerPoint Presentation
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: FOUO – For Official Use Only.

Slide 4 : Why Enablers

- “Almost everything in counterinsurgency is inter-agency. And everything important–from policing to intelligence to civil-military operations to trash collection–will involve your company with civilian actors and local indigenous partners you can’t control, but whose success is essential for yours…”Article 4, The Twenty-Eight Articles, Fundamentals of Company-level Counterinsurgency, By David Kilcullen

Instructor/Facilitator's Note:

1. David Kilcullen: a retired Lt. Col. in the Australian Army.
   - Instrumental in assisting General Casey in Iraq with the COIN.
2. The Australian Army trains Unconventional war fighting first and Conventional second. While US forces have trained Conventional first.
3. David Kilcullen has wrote many books to include the 28 Articles of Company Level. It is found in the Appendix of FM 3-24
4. Link Article 4 to the way Enablers can be used in any theater.

Slide 5: Joint IED Defeat Organization (JIEDDO)

1. Overview
   a. Focuses DOD actions in effort to defeat IEDs
   b. Coordinates with partner nations
   c. Help prioritize C-IED Research and Development
2. Capabilities
   a. Oversight of WTI activities
   b. Priority of exploitation
   c. Streamlines Science & Tech:
   d. Prioritizes R&D
   e. Force Protection requirements
   JOUNS
3. Employment
   1. Lines of Operation
   2. Attack the Network
   3. Defeat the Device
   4. Train the Force

Instructor/Facilitator's Note:

1. JIEDDO Leads DoD actions to rapidly provide counter-IED capabilities in support

of the Combatant Commanders and enable the defeat of the IED as a weapon of strategic influence

2. WEBSITE: https://www.jieddo.mil/index.aspx

Slide 6: Company Level Assets

(Transition Slide)

Instructor/Facilitator's Note:

- The following enablers are readily found at the company level and below and should be considered for employment during your mission.

Slide 7: Patrols

1. Overview:
   a. Types of patrols
      (1) Reconnaissance
      (2) Combat
   b. Answers Request for Information (RFI)/Specific Information Requirement (SIR)/Priority Intelligence Requirements (PIR)
2. Capabilities
   a. Intelligence collection
   b. Excellent source of ground level intelligence
   c. Must be briefed/debriefed
   d. Conduct Bio Enrollments
3. Employment
   a. Require clear task/purpose
   b. Examples may include Combat Logistics Patrol, Key Leader Engagement, and Route Clearance

Instructor/Facilitator's Note:

a. A patrol is a detachment sent out by a larger unit to conduct a specific mission. Patrols operate semi-independently and return to the main body upon completion of their mission. Patrolling fulfills the Infantry's primary function of finding the enemy to either engage him or report his disposition, location, and actions. Patrols act as both the eyes and ears of the larger unit and as a fist to deliver a sharp devastating jab and then withdraw before the enemy can recover.

b. A commander sends a patrol out from the main body to conduct a specific tactical task with an associated purpose. Upon completion of that task, the patrol leader returns to the main body, reports to the commander and describes the events that took place, the status of the patrol members and equipment, and any observations.

Slide 8: Company Intel Support Team (CoIST)

1. Overview
   a. Reduce uncertainty; aid in decision making
   b. Collect data and conduct pattern analysis.
   c. Facilitate the exchange and dissemination of intelligence.
   d. Advise the commander on intelligence-related matters.
   e. Manage the company's lethal and nonlethal targeting.
   f. Supervise the company's ISR program.
   g. Manage the patrol pre-brief and debrief processes for the company.

2. Capabilities

a. Planning

b. Conduct basic map reconnaissance

c. Analyze all previous patrol routes (Honesty Traces)

d. Integrate Intelligence Surveillance and Reconnaissance assets into your mission

e. Integrate Combat enablers

f. Gather the latest intelligence reports from your CoIST to make an assessment of the types of threats you can encounter on patrol.

g. Receive CoIST Pre-brief.

3. Lessons Learned

a. Prepare intelligence products to support combat commanders

b. Maintains Company ISR tools for combat patrols and Force Protection

c. Supervises intelligence operations within the company

d. Assists in determining significance and reliability of incoming information

4. Honesty Trace

Slide 9: Company Intel Support Team (CoIST) (Cont.)

1. The Battalion (BN) S-2 / CoIST relationship is critical to CoIST's success because:

2. BN S-2 shops have limited manpower and therefore must set themselves up for success by putting significant effort into the CoIST processes.

3. To achieve this, the S-2 needs to provide five things to the CoIST:

a. Training

b. Standard Operating Procedures (SOP)

c. Guidance

d. Feedback

c. Advocacy

Slide 10: Host Nation (HN) Partnership

a. Depiction of various Afgan National Security Forces (ANSF)

Instructor/Facilitator's Note:

1. Host Nation Partnership is the de facto exit strategy for coalition operation in Afghanistan and most other COIN campaigns.

2. After all, it is their fight to win or lose. It is their country.

3. These personnel are more sensitive to the environment and have a better developed sense for interpreting atmospherics and detecting subtle changes in the baseline of the AO.

4. Afghan National Army (ANA)

a. Assets have proven to be extremely proficient at detecting and interrogating IEDs.

b. Take every opportunity to train with and integrate ANA in as many operations as you can.

c. Learn from them.

5. Afghan Uniformed Police (AUP)

a. Although not as highly regarded by the population as the ANA, they present

another opportunity to understand your battle space.

b. Soldiers have had a great deal of success in patrolling with AUP, particularly in urban areas.

Slide 11: Interpreters

1. Overview
   a. Direct connection to population (Vital)
   b. 15+ languages spoken in Afghanistan (AF)
2. Capabilities
   a. Written and oral translation
   b. Military Linguists (DOD)
   c. CAT I / II / III
      (1) Contractor-provided (CAT I)
      (2) Unofficial: heritage/native
3. Employment
   a. All levels of Command
   b. Rehearse/practice
   c. Verify/record
   d. Cultural resource

Instructor/Facilitator's Note:

1. Interpreters

a. Discuss the use of interpreters, the trust placed in them, potential problems, personal experiences from the class, the different types and categories of interpreters.

b. Open the discussion with students' experiences using Interpreters.

2. Cat I: (local nationals, but may be US citizens who are not cleared for security).
   a. Authorized: Med/Dental, Room and Board Not Authorized: PX, Postal.
   b. Local employed persons or third country national
3. Cat II: (US citizens who have a Secret Clearance or access memorandum).
4. Cat III: (US citizens who have a Top Secret Clearance).

- Authorized Med/Dental, Room and Board, PX, Postal, and MWR (at Cmdr.'s Discretion).

5. In a Counterinsurgency, the most important thing is winning over the local population.
6. For most US Forces the only connection they have to the locals; whether Afghan Soldiers, Uniformed Police or local villagers is through their interpreters.
7. US Army doctrine describes interpreters as “vital,” which is obvious given the number of languages spoken in Afghanistan and lack of bilingual soldiers.

Slide 12: Local Population

- Picture depicts a US soldier talking to a local civilian.

Instructor/Facilitator's Note:

1. If the local population supports your actions, the frequency of attacks will decrease.
2. Locals have proven to be the most reliable source of information for detecting IEDs and avoiding attacks on coalition forces.
3. To assist you with the engagement of the population in your AO, there are a

number of enablers that can be of great assistance in providing direct or indirect support and information.

4. C-IED is a small part of overall Counter Insurgency (COIN) operations.

5. When given a chance, citizens will frequently alert you to attacks, IEDs, or cache locations.

6. A consistent observation cited in lessons learned and After Action Reports (AAR) from units that have been successful in Afghanistan is that a positive relationship with Local Nationals is a significant combat multiplier when it comes to detecting/defeating IEDs and attacking the IED network.

Slide 13: Hand Held Detectors (HHD)

- Picture depicts different type of HHD.

Instructor/Facilitator's Note:

1. Show slide with different variants of HHDs.

2. State the importance of the HHDs being used correctly, understanding the capabilities and how you as the Dismounted Counter IED Master Training, you are responsible for overseeing the training and advice on their TTPs to your Commanders and Soldiers.

3. Left - The VMR2 Minehound is a light weight (approximately 9 pounds) dual-sensor mine detector system.

a. It has a search head with a metal detector Electro-Magnetic Induction (EMI) and ground penetrating radar (GPR) capability.

b. The independently operating dual sensors increases the probability of detection against all types of mines, low metallic and completely non-metallic IED components.

c. It operates in a wide range of soils and automatically compensates for variations.

d. Detection is signaled by visual LED bar graph and audio signals to either the built in loud speaker or the headset.

4. Center - The Gizmo is a commercial light weight (approximately 5.5 pounds) compact metal detector that folds down to a small size for "fly away“ and CIED dismounted missions.

a. It has a digital pulse induction sensor that features automatic ground balance and a mineralized soil setting.

b. It continuously monitors itself and provides audio, visual and vibration indications for detection, battery health, electronic defects and search head cable faults.

c. It does not have GPR or non-metallic detection capabilities.

5. Right - The DSP-27 is a rugged, lightweight (approximately 7.5 pounds) battery operated, all weather, day and night handheld device.

a. Used for detecting specific targets during dismounted patrols.

b. Capabilities include detecting targets in shallow water and subsurface.

Slide 14: Hand Held Explosive Hazard Detectors

- Depicts the following pictures:

1. TruDefender (Altura)

2. Fido XT

3. The First Defender

4. HazMasterG3

5. Pocket-ETK N.C. Detect Kit

6. CRESS Kit

Instructor/Facilitator's Note:

1. Top Left - The AHURA TruDefender can be used as a hand-held or payload on a robotic platform to detect explosive trace vapors.

2. It features a point and shoot sampling ability and identifies explosives, toxic industrial chemicals, chemical warfare agents, narcotics, precursors, white powders and more.

3. Top Center – FIDO is a lightweight, durable, hand-held trace explosive vapor detector.

4. FIDO can be easily configured as a payload on a robotic platform.

5. Top Right - The First Defender can be used as a hand-held or payload on a robotic platform to detect explosive trace vapors.

- It features a point and shoot sampling ability and identifies explosives, toxic industrial chemicals, chemical warfare agents, narcotics, precursors, white powders and more.

6. Bottom Left – HazMasterG3 is a handheld vapor detection device.

- It's embedded software has integrated response information for CBRNE and IED missions.

7. Bottom Center – Pocket-ETK N.C. Detect Kit, Highly portable explosive detection kit.

- Capable of identifying the three basic (nitrates, chlorates/bromates, and peroxides) explosives, in bulk powder, liquid or solid form.

8. Bottom Right - Chemical Reconnaissance Squad Screen (CRESS) Kit Mod II is a colorimetric (color changing) screening kit that enable Soldiers to easily detect unknown bulk explosives, specific homemade explosives, fuels and oxidizers.

- This is one of the several variants available for HME detection.

Slide 15: Sensors

- Picture depicts various vehicle and ground-based sensor systems.

Instructor/Facilitator's Note:

1. Visual IED Signature Detection Suite (VISDeS)

a. Top Left: UTC: Universal Thermal Clip-on, Intermediate and long range thermal imager for use in front of sniper scopes and powered optics, weapons mountable, white and black hot, edge detect, thermal camera.

b. Bottom Left: UTB: Universal Thermal Binocular, Long range thermal binoculars, white & black hot, edge detect, IR and visible laser, thermal camera.

c. Top Right: UTM: Universal Thermal Monocular, Short and intermediate range thermal imager, white and black hot, edge detect, IR and visible lasers, thermal camera, weapon and helmet mountable.

d. Bottom Right: SKEETIR: Miniature Infra-Red Device, Short and intermediate range thermal imager, white & black hot, edge detect, IR laser, thermal camera, weapon and helmet mountable.

2. WOLFHOUND: is a portable, rugged ground based electronic direction finding tool used for early warning and force protection, that rapidly and accurately aids in locating ground based radio emitters that operate in the Very High Frequency (VHF) and lower Ultra High Frequency (UHF) radio bands, push to talk (PTT) radios. ie. The ICOM IC-V8.

- The WOLFHOUND can operated in standalone or cooperative mode, and has four deployment configurations, defined by remote antenna usage:

a. Custom Backpack (Hands-free and weapon-ready operations)

b. Vehicle-mounted (Mobile operations)

c. Fixed site (Static operations; I&W and Force Protection)

d. Hand-held

Slide 16: CREW

- Picture depicts the a THOR III SUITE, Balder, milion and Pipper.

Instructor/Facilitator's Note:

- Man-Portable Electronic Warfare system comprised of three separate components designed to defeat Radio Controlled Improvised Explosive Devices (RCIEDs) by jamming the signal that initiate the IED.

Slide 17: Robots

- Picture depicts iRobot 510 PackBot, SUGV, SWORDS TALON, Recon Scout XT (Throw BOT)

Instructor/Facilitator's Note:

1. Robots

a.There are numerous robots issued to the infantry and other units.

b. They can be carried on a mounted patrol or dismounted (size and weight dependent) and used when needed.

c .Robots can get close to a suspected object and not your soldiers, which provides standoff and can aid in confirmation.

d. Having this does not make a unit responsible for manipulating IEDs; if you suspect it is an IED-treat it as such; Conduct your 5Cs, UXO Report and call EOD.

e. These are used primarily if a unit is unsure of the object or does not have a clear view into a danger area.

2. iRobot 510 PackBot

a. Is a lightweight (approximately 30 pounds) man portable compact robotic platform used in support of intelligence, surveillance, reconnaissance, EOD and route clearance missions.

b. The manipulator arm provides dexterous manipulation of objects up to 10 pounds at full extension and 30 lbs in the close-in position.

c. System can be configured with wearable controller and heads up display ideal for patrols and dismounted operations.

d. Rugged design allows to climbs stairs and overcomes obstacles in all weather conditions.

e. Game style hand controller reduces operator training time.

3. SUGV

a. Is a light weight (approximately 30 pounds) compact man portable robotic

platform used by maneuver forces in dismounted operations, intelligence, reconnaissance, surveillance missions to minimize Soldiers' exposure to hazardous conditions.

b. Modular design allows multiple payloads to be integrated in a plug and play fashion.

c. Manipulator arm is an optional tool to interrogate suspicious items.

d. Wearable controller and heads up display ideal for patrols and dismounted operations.

e. Game style hand controller reduces training time.

f. Easily climbs stairs and overcomes obstacles.

g. Thermal camera captures white light images in the dark and through smoke, fog and battlefield obscurants.

4. TALON SWORDS

a. weighs less than 100lbs

b. controlled by RF or Fiber optic

c. TALON come in four models

(1) Regular for IED/EOD: equipped with robotic manipulator and sensors

(2) TALON (SOTAL): no arm but carries day/night cameras and listening devices

(3) SWORDS TALON: small arms combat and guard roles.

(4) HAZMAT TALON: Chemical, gas, temperature, and radiation sensors

5. Recon Scout XT (Throw BOT)

a. Is designed to be thrown (approximately 1.2 pounds) or tossed through a window or over a wall to inspect dangerous or inaccessible areas.

b. Automatic On Infrared Optics enables operators to obtain instantaneous day/night video reconnaissance.

Slide 18: Unmanned Aerial Systems (UAS)

- Picture depicts several UASs including Puma, WASP III (BATWAV), Raven, RQ-7 Shadow and MQ-9 Reaper

Instructor/Facilitator's Note:

1. Provide route reconnaissance prior to the mission.

2. Literally, squad leaders can observe the feed and "fly" their route prior/during mission.

3. This gives real time Intel of the route and any hot spots, road conditions, local presence, etc (UAS).

4. Provide long range observation.

5. These assets can be found at the company and above level.

6. Coordination for higher level UAS's require prior coordination.

7. Top Left - Puma, which is a small hand-launched Unmanned Aerial System (UAS)

.

a. It weighs approximately 10 pounds and is used by maneuver forces to provide day or night reconnaissance and surveillance capability.

b. It carries both an electro-optical (EO) and infrared (IR) camera on a light weight

mechanical gimbaled payload allowing the operator to keep “eyes on target”.

c. The air vehicle's modular design allows for alternative payload development to meet the needs of specific military or civilian applications.

8. Center – Raven, (approximately 4.5 pounds) has a 5 foot wingspan and only is 38 inches long.

a. It flies various missions that aid in force protection.

b. It is flown to search for IEDs, provide reconnaissance for patrols and flies the perimeter of camps.

c. The UAV is small and can be transported easily in three small cases that fit into a ruck sack.

d. The crew can bring it with them and operate wherever the patrol goes.

e. The Raven has three different cameras.

(1) An electrical optical camera, that sends data either through a nose camera or a side camera.

(2) An infrared camera in the nose.

(3) A side mounted IR camera.

9. Bottom Left – WASP III, (approximately 1 lb)

a. Forward and side looking color cameras

b. modular forward or side looking electro-optical payload

c. Electrically powered

d. USAF ground combat controllers

Slide 19: Sensors

- Picture depicts the following:

1. Vehicle Optics Sensor System (VOSS)
2. Ground Based Operational Surveillance System (GBOSS)
3. Persistent Threat Detection System (PTDS)

Instructor/Facilitator's Note:

1. Ground Based Operational Surveillance System (GBOSS)

a. Tower-based elevated sensor system with networked remote operational capability delivering increased situational awareness.

b. The sensor suite provided to GBOSS includes primary infrared camera, a second electro-optical infrared sensor and ground-based radar networked into a single remote ground control station.

c. Sensors provide persistent surveillance around military facilities and other key locations and can be set to provide a picket line covering a linear feature like a trail, road, or open area.

2. Persistent Threat Detection System (PTDS)

a. A tethered aerostat(balloon)-based system equipped with multi-mission sensors to provide long endurance intelligence, surveillance, reconnaissance and communications in support of coalition forces in Afghanistan.

b. Two models in use; one that reaches 1500m and the other 4600m.

c. Dissemination of threat data to operational forces to aid interdiction of hostile fires and unconventional threats.

d. Can be set in place to provide persistent coverage of an area.

e. Built in communication and data link.

3. Vehicle Optics Sensor Suite (VOSS)

a. The VOSS is a remotely controlled, telescope-equipped, broadcast-quality vehicle optics sensor suite that contains color, night vision, and infrared imaging equipment.

b. A unique optical system allows one telescope to gather light both a color and night vision camera.

c. It will operate under any climate and environmental conditions, day or night.

d. It is equipped with day, night, and infrared vision cameras.

Slide 20: Base Expeditionary Targeting Surveillance Systems Combined BETSS-C

1. BETSS-C Doctrine and Tactics Training (DTT) Team designed to train battle staffs on BETSS-C capabilities, limitations and employment considerations for ISR, RSTA, Persistent Surveillance, and Force Protection applications

2. Training Description

a. 60 minute BETSS-C overview for leaders and battle staffs that focuses on system capabilities, limitations, and planning/employment considerations

b. 120 minute Practical Exercise that focuses on battle staff planning for BETSS-C employment considerations and incorporation into ISR synchronization and planning

3. Requirements and Info

a. Cost: Training provided at NO COST to unit

b. Type: Doctrine and Tactics Training (DTT)

c. Audience: Primarily DIV/BCT/BDE/BN staff (COS/DCO/XO/S2/S3/S6) and leadership

d. Pax: 25 per session with multiple sessions available

e. Length: ~ 2.5 hours (scalable to unit needs)

f. Location: Unit location Clearance: None

g. Other: Team requires a classroom

* Note. All units will have some combination of these sub-systems (exact configuration determined by unit's location)

4. BETSS-C is comprised of 5 surveillance sub-systems:

1. Force Protection Suite (FPS)

- Cameras similar to those in RDISS; motion and acoustic sensors; Long Range Thermal Imager (LRTI); MSTAR GSR

2. Rapid Deployment Integrated Surveillance System (RDISS)

- CCTV cameras; Pan, Tilt, Zoom (PTZ) cameras; Mid Range Thermal Imager (MRTI)

3. Cerberus Scout Surveillance System

- Self-contained, dismounted system; daylight and IR cameras; ARSS GSR

4. Cerberus Surveillance System

- Self-contained, trailer-mounted system; daylight and IR cameras; ARSS GSR

5. Rapid Aerostat Initial Deployment (RAID) Tower

– 80’ or 107’ tower system; employs 360 degree sensor package; Star Safire III FLIR; MSTAR GSR

Instructor/Facilitator's Note:

1. BETSS-C Doctrine and Tactics Training (DTT) Team designed to train battle staffs on BETSS-C capabilities, limitations and employment considerations for ISR, RSTA, Persistent Surveillance, and Force Protection applications.

2. BETSS-C is comprised of 5 surveillance sub-systems:

a. Rapid Deployment Integrated Surveillance System (RDISS): CCTV cameras; Pan, Tilt, Zoom (PTZ) cameras; Mid Range Thermal Imager (MRTI)

b. Force Protection Suite (FPS): Cameras similar to those in RDISS; motion and acoustic sensors; Long Range Thermal Imager (LRTI); MSTAR GSR

c. Cerberus Surveillance System: Self-contained, trailer-mounted system; daylight and IR cameras; ARSS GSR

d. Cerberus Scout Surveillance System: Self-contained, dismounted system; daylight and IR cameras; ARSS GSR

e. Rapid Aerostat Initial Deployment (RAID) Tower: 80’ or 107’ tower system; employs 360 degree sensor package; Star Safire III FLIR; MSTAR GSR

Slide 21: Honesty Traces (TransApps)

1. TransApps (PANTHR) system consists of handhelds, client laptop, and servers/gateways

2. Handhelds are commercial Android devices with DARPA developed secure kernel and encrypted file system

3. Client laptops are used to transfer data to and from handhelds

4. With tactical radio connectivity, handhelds communicate with the gateway and server

Instructor/Facilitator's Note:

1. History of Honesty Trace

a. People set routines and patterns in everyday life.

b. This normal activity assists in managing the day-to-day activities of people’s lives.

c. The Army also sets routines and follows patterns.

d. Daily formations, standing operating procedures (SOPs), and standardized training tasks are a few examples.

e. The size and complexity of the Army’s mission makes setting routines and following patterns necessary.

f. However, this normal activity can cause casualties in our current fight.

g. Insurgents constantly observe U.S. and coalition forces to detect patterns they can exploit.

h. The insurgents are particularly successful in detecting frequently traveled mounted or dismounted routes caused by setting patterns.

i. Insurgents emplace improvised explosive devices (IEDs) and conduct ambushes (or both) on these routes.

j. Honesty traces identify these patterns and help prevent attacks.

2. The British developed honesty traces in Northern Ireland. They found that when patrols set patterns and followed the same routes, attacks frequently occurred at these locations. The technique of recording a patrol's actual route and then planning a different route lowers the number of attacks.

3. The definition of an honesty trace is a map plotted with all the actual (vice planned) routes taken by convoys or patrols. It is a historical record of vehicle and dismounted Soldiers' movements across an area.

4. An honesty trace shows friendly patterns, identifies chokepoints, and keeps units honest on the variance of their routes.

5. There are three ways to construct honesty traces:

a. manual (acetate and grease pencil)

b. use of a global positioning satellite (GPS) device

c. submitting a request to Force XXI Battle Command Brigade and Below (FBCB2) using Blue Force Tracker (BFT)

6. Manual

a. This is the method developed by the British. Upon completion of their patrol, units manually trace their route on acetate or tracing paper positioned over a map. This is the simplest method for constructing honesty traces.

b. A squad or platoon leader can accomplish it with few resources.

c. The leader must plot the honesty trace by hand to achieve accuracy.

d. Shortcomings of this method are the dissemination between units and the honesty trace accuracy depends on the memory of the leader.

e. The biggest advantage of the manual method is the accessibility of acetate, its reuse, and the instant visual feedback on where a patrol was most vulnerable.

7. GPS

a. The Marines developed this method in 2009.

b. The GPS method uses a commercial GPS device to record a route (track logs), which a Soldier can download and overlay on electronic imagery.

c. Soldiers with a basic level of digital literacy have no difficultly using this method. All that is required is a GPS, a computer with the proper software, and a method of dissemination.

d. During the patrol the patrol leader sets his GPS to track the route.

e. This creates a track log, which, upon returning, a Soldier can download onto a computer using Garmin® MapSource software.

- MapSource software comes with a Garmin® GPS.

f. An unclassified version with Afghanistan map data is available from the U.S. Army Geospatial Center Garmin® Map Support Product Library.

g. The company intelligence support team (COIST) or staff intelligence officer can display the route on Google Earth if sufficient bandwidth is available.

h. If not, then they convert the route to a shapefile file format (.shp) with Excel2FV and overlay on a map by opening with FalconView.

i. The patrol leader can have his previous honesty traces uploaded to his GPS for future mission planning.

j. Units can disseminate honesty traces to higher headquarters and other units by

the Tactical Ground Reporting System (TiGR) or by posting the track logs on a SharePoint site.

k. Honesty traces received at higher headquarters enhances their intelligence analysis. (The Creating Honesty Trace with a Garmin® link at the end of this chapter provides detailed instructions.)

Slide 22: RED DOT

- Picture depicts a map and field computer

Instructor/Facilitator's Note:

The RED DOT class is found in the student CD.

Slide 23: Tagging Tracking Locating (TTL)

1. Commander's require information that supports the development, planning, and execution of combat operations

2. All-source intelligence analysis and collection drives operational planning by:

a. Developing situational awareness

b. Determining threat composition, disposition, capabilities, and limitations

c. Answering the Commander's Critical Intelligence Requirements (CCIR)

* Note: Tagging, tracking, and locating (TTL) operations provide intelligence and operational planners an additional tool to develop actionable intelligence supporting the Commander's priorities

Instructor/Facilitator's Note:

1. The Commander relies upon the intelligence staff and their capabilities to provide the information needed to successfully destroy the enemy.

2. In order to accomplish the mission, the Commander must not only dominate the battlefield, but the information environment as well.

3. As intelligence professionals, collecting, fusing, analyzing, and disseminating all-source information drives the operational cycle.

4. It's not as easy as it once was yet the expectations of the Commander have not diminished, in fact, the Commander demands even greater awareness and threat understanding.

5. The intelligence and information demands of today can not be met by simply turning on a satellite.

6. We have to integrate evolving technologies such as tagging, tracking, and locating to provide the additional information that drives actionable intelligence supporting the Commander's needs.

7. POCs

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Slide 24: SIPR Links to Classified Sysytems

- Shows various SIPR links

Instructor/Facilitator's Note:

- This is a **HIDDEN slide** and information is updated as necessary.

Slide 25: IED Defeat/Denial Tools

- Picture depicts a culvert denial and a hasty road repair

Instructor/Facilitator's Note:

- E-UGS

1. An upgraded early warning monitoring system featuring “consumable” unattended seismic sensors that can be deployed several miles away the from military bases.

2. Capable of the early detection of people walking and vehicles.

Slide 26: SIPR Links to Classified Sysytems

- Shows various SIPR links

Instructor/Facilitator's Note:

- This is another HIDDEN slide and information is updated as necessary.

Slide 27: Biometric Tools

1. Biometric Automated Toolset (BAT)
2. Handheld Interagency Identity Detection Equipment (HIIDE)
3. Secure Electronic Enrollment Kit (SEEK II)

Instructor/Facilitator's Note:

1. Biometrics will improve your unit’s ability to identity, verify, and manage the populace in your Operational Environment (OE).

2. Biometrics systems by themselves and the data collected is not an end unto itself but part of a larger process of Identity Management and Identity Resolution.

3. By providing a physical link to the biographical and contextual information gathered during operations.

4. Biometrics can help answer the questions Soldiers and Leaders have: “Who is this person and what have they been doing in my operational environment?”

5. Biometrics Automated Toolset (BAT)

   - Ruggedized laptop computer used to collect, match, transmit, and store biometrics and related contextual data.

6. Handheld Interagency Identity Detection Equipment (HIIDE)

   - Handheld, lightweight (approximately 2.3 Pounds) collection tool for biometric (fingerprints, iris and facial images) enrollment. This is being replaced by the SEEK II.

7. Secure Electronic Enrollment Kit (SEEK II)

   - Next generation biometric handheld identification and enrollment platform that collects personal and biometric (fingerprints, iris and facial images) information with WiFi capabilities.

8. Biometric Collection Modalities: Iris scan, Fingerprint, & Facial recognition

9. The key is to understand that this is not a linear process but one that is cyclical and can influence planning at all levels.

10. The four biometric functions are: Collect, Match, Store, & Share.

    a. Collect

       (1) consists of capturing a biometric sample

       (2) Enrollment describes one piece of the collect function

b. Match: comparing a standardized biometric file to an existing source.

c. Store: enrolling, maintaining, and updating biometric files.

d. Share: exchange of biometric files.

11. Smartcards, classes, and other guides are located on the student disc for HIIDE and SEEK II.

Slide 28: Military Working Dogs (MWD)

1. Overview
   a. Integrated
   b. Explosive/IED Detection
   c. Remote/stand off
   d. Real time
2. Capabilities
   a. Multiple Dogs/Functions
   b. Explosives
   c. Narcotics
   d.. Search
   e. Patrol Explosive Detection Dog (PEDD)
   f. ***(deleted bullet)*** Tactical Explosive Detection Dog (TEDD)
   g. Explosive Detection Dog (EDD)
   h. IED Detection Dog (IDD) USMC Program
   i. Mine Detection Dog (MDD)
   j. Multipurpose Canine (MPC)
   k. Specialized Search Dog (SSD)
   l. Combat Tracking Dogs (CTD)
3. Employment
   a. Consider ROE for use
   b. Planning considerations are important (food, water, kennel)

Instructor/Facilitator's Note:

1. Introduce and begin discussions on working dogs.

2. Stress some points on working with dogs, including how they get tired, the need for food, water, and AC, rules of use in AOs.

3. Working Dog

   - Many types of dogs: narcotics dogs, cadaver dogs, seeing eye dogs, etc.

4. These are very useful tools when used properly.

5. They can help detect threats, explosive or mines and can also intimidate personnel as well, which can be a force protection measure.

6. There are some things that we need to discuss regarding the WD.

7. They aren't to confirm the presence of suspicious items nor the absence.

8. Handler will not tamper with anything that the dog has alerted to.

9. There are some planning considerations also, for example: kennel, food, water and air conditioning.

10. You need to plan for room for the dog and the handler on the operation ROE.

11. CASE Study

- According to an FBI Laboratory Post Blast Evidence Study in 2004, showed that the human scent could survive after exposure to explosive effects and retains potential for use in criminal investigations. The dogs correctly identified the target person in 53 of the 80 bomb-debris experiments and 31 of the 40 arson-debris experiments with NO false identifications.

12. Patrol Explosive Detection Dog (PEDD): Detection of explosives on-lead and in controlled aggression. Search for weapons, ammunition, and explosives on-leash in buildings and vehicles.

13. Explosive Detection Dog (EDD): Same as PEDD except not trained as attack dog.

14. Specialized Search Dogs (SSD): The SSD has the ability to work off-leash ahead of the handler. The SSD Team provides a quick mobile and versatile to aid in route clearance, area searches, building searches (occupied and un-occupied), vehicle searches, and cave search operations. The SSD Team can considerably reduce the time spent on target. It is an excellent tool to search in high metal content areas SSDs are best employed in offensive searches (i.e. weapon cache search) to disrupt enemy activity Besides these bullets and previous discussions, discuss how they are extremely useful for detecting in areas where a metal detector is useless, like a scrap yard or near a chain link fence.

15. Mine Detection Dog (MDD): MDD work on a short-lead or long-line under direct control. Perform military mine detection missions in a hostile environment.

16. Combat Tracking Dogs (CTD): Uses human-scent evidence to identify bomb maker/placers. Exploiting post-blast/UXB attack site, leading QRF back to the enemy.

17. IED Detection Dog (IDD): The IDD is a purpose-driven dog specifically developed for employment by ground combat units and those units performing security force missions, this is a USMC program.

18. Off-Leash Specialized Search Dog: Army and Marine Engineer and Military Police handled explosive detection dog that can perform target odor searches in all tactical environments either on or off- leash.

19. Mine Dogs: These dogs work exclusively with the Army Engineers. They work on leash only and are trained to target specific odors while searching in all tactical environments. They provides subsurface capability for mine detection.

20. Tactical Explosive Detection Dog (TEDD): TEDD Teams are capable of searching routes, buildings, areas and vehicles for a variety of explosives or their precursors. They are used in all types of searches. They work primarily off leash to detect explosives, weapons and ammunition. Both the dogs and handlers are trained by contractors.

Slide 29: MWD Capabilities

1. An exploitable, psychological effect on enemy forces, and indigenous populations

2. Provide detection and deterrence capabilities in both offensive and defensive operations

3. Add force protection to FOBs, COPs, and Firebases

Instructor/Facilitator's note

- (TEDD) Program

1. Is an eight week course designed to produce a Single Purpose Dog Team that is capable of detecting a variety of explosives and explosive compounds.

2. The team has the ability to search buildings, rooms, vehicles, open areas, and conduct route clearance; both on and off leash.

3. For off leash searches, the dog is trained to work at a minimum safe distance of 100 meters from the Handler

Slide 30: MWD Considerations

1. Trained not to bite, but any dog will bite if threatened
2. May become protective if handlers are seriously wounded or killed
3. May fight with feral dogs and other animals when working off-leash
4. Can be distracted or bark at inconvenient times
5. Can be reluctant to negotiate terrain or areas that are physically harmful
6. Employment around POL must be infrequent and brief since POL residue can damage a dogs paws and sense of smell
7. May not be trained to search people
8. Searching people may cause culture sensitivity

Instructor/Facilitator's note

- Give examples of these.

Slide 31

Check on Learning:

1. A patrol may be either a reconnaissance or combat and is a detachment sent out by a larger unit to conduct a specific mission. True or False?

Answer: True

2. If a local national interpreter is Cat I qualified, they are cleared for security. True or False?

Answer: False

3. Which of the following is not a Company level asset?
a. Hand Held Detector
b. Robots
c. Sensors
d. JET

Answer: d. JET

Review Summary: During this LSA we covered how to identify company level assets including:

1. Patrols
2. CoIST
3. Hand held detectors
4. Hand held explosives hazard detectors
5. Sensors
6. CREW
7. Robots
8. UAS
9. Honesty traces
10. Biometric tools
11. MWDs

Note: You may elaborate or ask students to summarize some of these points.

TLO - LSA 2. Learning Step / Activity TLO - LSA 2. Identify Battalion/Brigade Assets

Method of Instruction:	Discussion (small or large group)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH, ABIC/FIFC qual and CIED SME (1:5)
Time of Instruction:	1 hr
Media Type:	Actual Equipment / Handout / PowerPoint Presentation
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: FOUO – For Official Use Only.

Slide 32: BN/BDE Assets

Instructor/facilitator's Note:

- This is a transition slide.

Slide 33: Joint Expeditionary Team (JET)

1. Overview

a. The Joint Expeditionary Team (JET) concept originated with the Army's AWG support to the IED Defeat Task Force

b. JET was formed on October 1, 2006 with 13 personnel with the formation of the Joint IED Defeat Organization (JIEDDO)

c. Program expanded to 72 Advisors in January 2013

d. The JET conduct operational embeds in theater to advise and collect "first-hand" C-IED information, TTPs, best practices and lessons learned

e. The JET is rapidly deploying C-IED enabler that has supported all COCOMs with various assistance and assessment missions, and is leveraged to assist U.s. units, coalition partners and interagency as directed to better prepare to conduct C-IED operations

f. JET Advisors are specially screened and selected through a tailored Recruitment, Assessment, and Selection (RAS) process

g. JET members come from a variety of backgrounds such as Special Operations Forces, Military Intelligence, Conventional Military and Law Enforcement.

2. Method of Operation

a. First hand Experience

b. Provide support to Army and Marine pre0deployment and institutional

c. CONUS

(1) NTC

(2) JRTC

(3) JMRC

(4) JCOE

(5) USAIC

(6) SOI

(7) Mojave Viper

(8) PTP

(9) MRX

(10) ECOE

(11) MCWLL

d. Relationship with deploying units

e. JET-Afghanistan

- 1-2 man teams embedded with deployed units; Advise on IOOs, Observe, collect, disseminate Lessons Learned

f. JET Advisors normally do 90-120 day "port-starboard" deployments IOT get currency injected back into unit CONUS training

3. CIED ADVISORY MISSION (CAM)

a. These are “embed missions: conducted with units, from platoon or company on patrol outside the wire, to focused assistance at the Bn/Bde staff level

b. JET members integrate with units in as unobtrusive manner as possible in order to observe the full spectrum of those units’ CIED operations

c. Attack the Network

(1) ACCM Programs

- TTPs/LL

(2) Site Exploitation

(3) Evidence Processing for prosecution

(4) Biometrics

(5) Targeting TTPs

(6) ISR Solutions and Implementation

(7) Mounted TTPs

(8) Dismounted TTPs

(9) Red TTPs

d. Deter the Device

e. Train the Force

(1) Current and relevant operations from the combat theater

(2) Participates in unit’ s predeployment and premission training; both locally and at the training centers

(3) Advise and assist unit staffs and commanders in the art of integration and synchronizing all elements of the CIED fight

Instructor/facilitator's Note:

1. JET

- Their mission: Observe, Collect, Analyze and Disseminate information across all three JIEDDO Lines of Operations: Attack the Network (AtN), Defeat the Device (DtD) and Train the Force (TtF).

2. In October 2006, when the IED Defeat Task Force became the Joint IED Defeat Organization, senior leaders decided to create a small team of Counter IED (C-IED) subject matter experts who would deploy on short notice, anywhere in the world. Thus the JET was born. Their task and purpose was to advise and assist in the art and science of Counter IED. The JET mission has matured over the years and now JETs regularly provide Attack the Network and Defeat the Device advice, mentor US and Coalition Forces, as well as recommend C-IED material solutions.

3. The Team is primarily populated with retired Special Operations Officers and NCOs from all branches of the service. However, the complexities of the IED fight demanded that JET expand its cadre to include subject matter experts from federal law enforcement and Command Sergeants Major with broad and far reaching backgrounds. These additions have helped JET to expand their long term relationships with key leaders at Division and Corps level. Regardless of background, all JETs have long years of service and numerous combat tours making them perfectly suited to embed and accompany units on combat patrols anywhere US Forces operate.

4. A normal JET deployment schedule is four months in Afghanistan and four months back in the United States. When in Afghanistan, JETs conduct operational embeds called C-IED Advisory Missions or “CAMs.” These “embed missions” can be with a platoon on patrol outside the wire or assisting a Battalion or Brigade staff develop their C-IED strategy. During a typical CAM, JETs examine all aspects of C-IED operations and strategies, collect the newest and best tactics, techniques, and procedures, and offer advice when units are operating with out-of-date assumptions or unsafe practices. They also recommend material and non-material solutions relevant to the unit’s circumstances. CAMs are conducted in an unobtrusive manner without the stigma of an inspection.

5. If there is a JET at the class, give them a few minutes.

Slide 34: JET Lessons Learned/ Best Practices

1. Attack the Network: Focused Biometric Collections, Evidence Based Operations, Prosecution Support Packages

   a. Afghanistan Captured Material Exploitation (ACME) Labs and EACs

   b. BOLO products

   c. ANSF Reporting Challenges

   d. Enabling ANSF Operations

2. Defeat the Device:

   a. Identifying and Bypassing or Clearing Vulnerable Areas/Vulnerable Points

   b. Layering C-IED assets: ISR/UAVs, Aerostats, Wolfhound, Unattended Ground Sensors (UGS), CDS, CMRGs

   c. Dismounted operations in conjunction with Mounted – BPT dismount

   d. Pattern Avoidance – Trojan Horses and Hoax Devices

e. Use of Hand Held Detectors, Robots, and other devices that permit MAXIMUM stand-off from suspected devices

f. Integration of CREW: Mounted and Dismounted

3. Train the Force: CJTF Paladin Mobile Training Teams for US and ANSF

Instructor/facilitator's Note:

None

Slide 35: Human Intelligence (HUMINT) Collection Teams (HCT)

1. Overview
   a. Collect/report info from human sources
   b. Provide CI/HUMINT Operations Support
2. Capabilities
   a. CI/HUMINT Ops Support
      (1) Liaison/Observation
      (2) Interrogation
      (3) Debriefings
      (4) CI Force Protection Source Operations
3. Employment
   a. DS to Infantry BNs
   b. Part of Multi Function Teams (MFT)

Instructor/facilitator's Note:

1. HUMINT collection capability is limited when commanders do not provide support specifically to the HCT for the conduct of HUMINT collection missions. Often HCTs are required to travel with patrols in order to have mobility within the AO.

2. While this does get the HCT off the base or camp, it does not allow them the time or flexibility to conduct a HUMINT collection mission.

3. The nature of patrol missions requires them to keep on the move most of the time. HUMINT collection missions often require the HCT to remain at a location for extended periods.

4. In order for HUMINT collection missions to be successful, commanders must provide dedicated mission support to allow for this requirement.

Slide 36: Law Enforcement Professional (LEP)

1. Overview
   a. Civilian Law Enforcement
   b. Provide expertise to:
      (1) HN Law Enforcement
      (2) HN Military
      (3) US Military
2. Capabilities
   a. Counter-crime syndicate/network
   b. Prosecution support
   c. Evidentiary preservation
   d. Mentor HN Police
3. Employment
   a. LEP 1: BCT and above

b. LEP 2: BN and below

c. Assists units in TSE training

d. Evidence handling/collection

Instructor/facilitator's Note:

1. Intro to the LEP Program, stating who they are, where they come from, where they are embedded, and who maintains oversight on them.

2. LEP Program leverages the knowledge and skills of former law enforcement personnel with 10-30 years of experience to attack IED network activity.

3. Examples of LEP are retired agents from: FBI, BATF-E, U.S. Customs and Border Protection, DEA, and federal, state, and local police agencies.

4. The military has credited the LEP program with significant contributions in targeting, capturing, and prosecuting criminals and insurgents which has led to increased community stability and saving Soldiers' lives.

5. LEPs have been embedded as vital members of the US Military.

6. As a highly skilled team consisting of experienced criminal enterprise investigators.

7. LEPs serve as investigators, planners, advisors, and subject matter experts in support of designated US Army and Marine units.

8. LEPs have transferred their law enforcement experience from investigating criminal suspects and networks in the US to investigating the insurgency in Iraq and Afghanistan.

9. Critical Tasks

a. Criminal network analysis

b. Insurgent network analysis

c. Community Policing Program

d. Police Information Operations

e. Investigative support

f. Advance national police training

g. Embedded at DIV, BDE, and BN

h. Advisory to S2/3

10. Office of the Provost Marshal maintains oversight.

11. LEP Teams are staffed at two levels:

a. LEP-1 provides support to BCT an above.

b. LEP-2 provides support to battalions and below.

12. Depending on BCT commander's requirements, LEP teams may operate at the company level.

Slide 37: Route Clearance Patrol (RCP)

1. Overview

a. Patrol: Engineers with specialized equipment

b. Sweep Main Supply Route (MSR)/Alternate Supply Route (ASR) and identify potential IED's

2. Capabilities

a. Explosive Ordnance Clearance Agent (EOCA)

b. Confirms IED presence from the protection of the vehicle

c. Footprint in multiple AOs

3. Employment

a. Commanders' option on RCP packages

b. Used to classify route

c. ID impediments to maneuver

Instructor/facilitator's Note:

1. The primary mission of a Route Clearance Patrol (RCP) is to clear routes of improvised explosive devices (IEDs). Offensive RCP operations disrupt the enemy's IED emplacement cycle and allow time to create additional IED countermeasures. All RCPs use variants of the same basic RCP formation. Each variation used by the RCP commander is an adaptation based on the type of route (improved versus unimproved), quality of the road surface, history of IED emplacement, and visual indicators present on the route. The order of march may change throughout the mission based on visual indicators, current intelligence, and changes in conditions along the route itself.

2. The basic components of RCPs are detection, interrogation, EOD, mission command (formerly referred to as command and control), and security. The detection element can be Huskies or mine rollers, which would lead the RCP. Interrogation and EOD fall in behind the detection element but stay in that order. Security vehicles should spread out within the RCP to ensure complete security coverage.

Slide 38: Route Clearance Tools

- Picture depicts various route clearance capabilities and tools.

Instructor/facilitator's Note:

1. Route Clearance Blade

a. It is a skidding blade mounted to the front of a vehicle used to clear roadways of trash/ debris-does not dig.

b. Capabilities: Remote Control / Positioning.

c. The in-cab controller is connected to the RCB system through the hydraulic power unit, and is used to navigate the Navy-RCB into various positions.

2. Mine Roller System (MRS)

a. A mine roller is used for proofing a route to be free of live IEDs.

b. Characteristics: The Panama City Generation III Mine roller system (PC Gen III MRS is a full coverage front roller system.

c. The Gen III is designed with a modular concept (the wheel banks can be configured to meet different mission requirements).

3. Husky Mounted Detection System

a. The GPR is mounted on a Husky vehicle and is used to detect IEDs and both surface and ground buried AT mines.

b. The HMDS is the primary system installed on the Husky vehicle. It utilizes advanced, high performance Ground Penetrating Radar (GPR) technology to detect and mark underbelly (not side attack) surface laid and buried Anti-Tank (AT) landmines and IEDs on primary and secondary roads.

c. Capabilities: The system is installed as a kit on Mark II and Mark III Huskies, and is operated by the Husky operator.

4. Man Portable Line Charge (MPLC)

a. The MPLC Tactical Line Charge is a lightweight, man portable, rocket launched explosive system.

b. The MPLC provides tactical units with the ability to conduct clearing operations in urban and complex environments from a covered or concealed position.

c. The MPLC Tactical Line Charge system is self-contained in a lightweight backpack designed for carry and quick deployment by one soldier.

d. Once the system is in firing position, a shock tube device, the skin-pack Detonator Assembly, will initiate the rocket and detonate the line charge.

Slide 39: IED Defeat/ Detection Tools

1. MINOTAUR: Robotic Mine Clearance System
2. ANTI-PERSONNEL OBSTACLE BREACHING SYSTEM (APOBS)
3. Caterpillar D7
4. DOKING Remotely Controlled Flail

Instructor/facilitator's Note:

- The APOBS is an explosive line charge system that allows safe breaching through complex antipersonnel obstacles, particularly fields of land

Slide 40: Electronic Welfare Officer

1. Overview
   a. Electromagnetic use (EM)
   b. Three Major Subdivisions:
      (1) (EA) Electronic Attack
      (2) (EP) Electronic Protection
      (3) (ES) Electronic Warfare Support
2. Capabilities
   a. Sync ISR/jam platforms
   b. Maintenance of CREW
   c. EW/CREW integration
   d. EW targeting
3. Employment
   - Varies with each service / unit
   a. Typically located at BCT, RCT, and BN level
   b. Organic CREW specialists assigned at BN above

Slide 41: Unified Exploitation (UE)

1. Overview -Unified Exploitation (Search) is a key operational capability with a wide utility across the spectrum of operations to combat conventional and non-conventional threats.
2. Capabilities- Dismounted Search Tasks
   a. Area Search
   b. Personnel Search
   c. Tactical Questioning
   d. Vehicle Search
   e. Occupied Building Search
   f. Unoccupied Building Search

3. Employment -Each Maneuver BN will have at least one-9 man intermediate search squad (CENTCOM Required) capable of executing tactical site exploitation.

Instructor/facilitator's Note:

- Relate back to LEP and how they have assisted soldiers in collecting and processing evidence so the bad guys are convicted in the host nation court system.

Slide 42:

Check on Learning:

1. What is the mission of JET?

answer: Observe, Collect, Analyze, and Disseminate information across all three JIEDDO lines of Operation

2. Which enabler provides CI Force Protection Source Operations?
a. BSA
b. JET
c. COIC
d. HUMINT

answer: d. HUMINT

3. LEP 1 provides support to what level?

answer: BCT and above

4. Name at least 3 Counter IED Enabler assets at the DIV/CORP/Theater level.

answer:
a. ORSA
b. Task Force ODIN
c. NGIC
d. COIC
e. FET
f. JIEDDO
g. PRT
h. HTT
i. CJTF Paladin

Review Summary:

Slide 43:
During this LSA we covered Battalion and Brigade level assets to include:
1. Joint Expeditionary Team (JET)

2. HUMINT Collection Teams (HCT)
3. Law Enforcement Professionals (LEP)
4. IED Defeat/Detection tools
5. Electronic Walfare Officer
6. Unified Expoitation (UE)

Note: Use this statement or develop one of your own relating to the material.

Slide 44: Questions?

SECTION IV. SUMMARY

Method of Instruction:	Discussion (small or large group)
Mode of Delivery:	Resident Instruction
Instr Type(I:S Ratio):	Military - ICH, ABIC/FIFC qual and CIED SME (1:5)
Time of Instruction:	5 mins

Check on Learning

Determine if the students have learned the material presented by soliciting student questions and explanations. Ask the students questions and correct misunderstandings.

Review/ Summary

1. Lesson: Unified Action Enablers

2. During this lesson we discussed:

a. Identify Company level assets

b. Identify BN/BDE assets

Instructor Note:

Quickly review each topic

SECTION V. STUDENT EVALUATION

Testing Requirements	This lesson will be tested on Course Examinations and rubric evaluations. You must receive a passing score of 80% or greater on the examinations to complete this course.
Feedback Requirements	**Note:** Feedback is essential to effective learning. Schedule and provide feedback on the evaluation and any information to help answer students and questions about the test. Provide remedial training as needed.

Appendix A - Viewgraph Masters

Unified Action Enablers
071-FREBB008 / Version 02.0 ©

Sequence	Media Name	Media Type
None		

Appendix B - Assessment Statement and Assessment Plan

Assessment Statement: None.

Assessment Plan: None.

PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 071-FREBB008 Version 02.0 ©

Appendix D - Student Handouts

Unified Action Enablers
071-FREBB008 / Version 02.0 ©

Sequence	Media Name	Media Type
None		

Unified Action Enablers

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DRAFT

1. The importance of this lesson: (Why)

Identify the Unified Action enablers available to dismounted C-IED planning and execution.

2. What we want our Soldiers to Achieve: (Outcomes/Standard)

Identify the Unified Action enablers IAW FM 3-21.8, FM 3-24 JIEDDO Smart book and must score of 80% or greater on examinations/rubrics and includes:

1. Identify Company level assets
2. Identify BN/BDE assets

Learning Domain: Cognitive
Learning Level: Knowledge

3. Tasks to be taught

Task Number	Task Title	Task Type
None		

Additional Non-Standard Tasks

None

4. References:

Reference Number	Reference Title	Date
ATP 2-22.85	BIOMETRICS MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR TACTICAL EMPLOYMENT OF BIOMETRICS IN SUPPORT OF OPERATIONS http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp2_22x85.pdf	01 Apr 2014
ATP 5-19 (Change 001 09/08/2014 78 Pages)	RISK MANAGEMENT http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp5_19.pdf	14 Apr 2014
DD FORM 2977	DELIBERATE RISK ASSESSMENT WORKSHEET	01 Jan 2014
FB (Safety) Form 385-1-E	Daily Risk Management Assessment Matrix	01 Oct 2013
FM 3-21.8	THE INFANTRY RIFLE PLATOON AND SQUAD	28 Mar 2007
FM 3-24 (Change 001, June 02, 2014)	INSURGENCIES AND COUNTERING INSURGENCIES http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_24.pdf	13 May 2014
FM 3-24.2	TACTICS IN COUNTERINSURGENCY	21 Apr 2009
FM 3-34.5	Environmental Considerations	16 Feb 2010
HIIDE SERIES 4	HIIDE Series 4 (Handheld Interagency Identity Detection Equipment) User Guide & Technical Manual	13 Oct 2006
HIIDE SERIES 4 (DM)	HIIDE Series 4 (Handheld Interagency Identity Detection Equipment) Device Manager User Guide	29 Jun 2006
SEP 243-ASI7D (96U10)	Student Evaluation Plan (SEP) for 243-ASIU2, Shadow RQ-7A UAV Operator	01 Feb 2006
SH 21-76	Ranger Handbook	02 Jan 2011
THOR III	Technical Manual, Operation and Maintenance With Parts Breakdown Organization Level for the THOR III System P/N 118600-001	29 Sep 2009

Additional Non-Standard References

None

5. Resources

TIME: Time of Instruction: 2 hrs 10 mins

LAND: Classroom, Training Area, and Range Requirements

Id	Name
74046	Consolidated Open Dining Facility
44224	Organizational Storage Building
72114	Enlisted Barracks, Transient Training
17120-M-1200-30	Classroom, Multipurpose, 1200 Square Feet, 30 Students

AMMO: Ammunition Requirements

DODIC	Name
None	

MISC: Materiel Items and TADSS Requirements

Id	Name
2310-01-090-7709	Bus Transit 44 Passenger
4110-01-485-3548	Chest, Ice Storage, White, 162 Quart Capacity
5820-00-NSN	SCREEN, PROJECTION
5820-00-T93-6432	PROJECTOR, VIDEO, LCD EPSON ELP33 WITH REMOTE
5860-01-363-8730	Laser Pointer
5895-01-540-4543	Computer, Laptop
6530-01-290-9964	Litter, Folding, Rigid Pole
6545-01-532-3674	Medical Equipment Set, Combat Lifesaver, Version 2005, UA 245A
6665-01-381-3023	Wet Bulb-Globe Temperature Kit
6685-01-590-1047	Monitor, Heat Stress: Questemp 44
6760-00-985-6749	Tripod, Photographic
7021-01-C17-2297	PC Tablet, Data Entry: Galaxy Tab 2 WIFI 16GB Samsung
7240-00-098-3827	Can, Military

(Note: Asterisk before ID indicates a TADSS.)

Additional Non-Standard Resources

None

6. A possible technique to achieve the outcome:

None

7. Conduct AAR with Soldier and Cadre.

None

NOTE: Before presenting this lesson, Instructors must be thoroughly prepared by studying the appropriate lesson plan and identified reference material.