**Front-End Analysis Plan: U.S. Army EOD Team Leader Certification**

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## Problem Identification

### Performance Problem

The success rate of U.S. Army Explosive Ordnance Disposal (EOD) prospective Team Leaders during EOD Team Leader certification is less than 30% during initial assessments.  To maintain a corps of Certified EOD Team Leaders and to meet the demand of EOD operations, this rate must be maintained at 70% or higher.

### *Context*

With the ever-changing geopolitical climate, forecasting combat-related involvement of EOD forces is difficult, if not nearly impossible.  U.S. Army EOD Soldiers comprise one of the few military components that maintain real-world peacetime mission sets.  The peacetime mission of EOD Soldiers is as equally involved as EOD combat operations and requires the same training, knowledge, skills, attitudes, certifications, and preparation as combat operations.  Therefore, for the purposes of this plan, the focus will remain on peacetime operations of U.S. Army EOD forces.

U.S. Army EOD Soldiers are responsible for the identification, render safe, and safe disposal of all military ordnance located on land surfaces within the contiguous United States.  Further, they are responsible for the protection of the President, Vice-President, and domestic and foreign Heads of State in support of the United States Secret Service (USSS).  U.S. Army EOD Soldiers also provide Defense Support to Civilian Authorities (DSCA), namely, Local Law Enforcement (LLE) agencies regarding the safe remediation of explosives and explosive devices when no LLE bomb disposal personnel are assigned or available.  Lastly, a certified EOD Team Leader, who maintains comprehensive site responsibility and final decision authority during all explosive incidents, must lead U.S. Army EOD forces responsible for these activities.

*Current Problem Status*

Historically, EOD Team Leader certification rates within the U.S. Army fluctuate between 40 and 80%. This fluctuation may be attributed to several factors including:

- Low service retention rates

  - EOD Soldier skills and abilities are highly sought after in the private sector, where these individual's financial compensation for work performed increases drastically when compared to military pay and entitlements.

- Adjustment of training and certification standards

  - Certification standards tend to vary due to need for increases in certified EOD Team Leaders and projected surpluses.

- Generational knowledge gaps

  - Due to force reduction requirements set by the U.S. Army, significant portions of seasoned EOD Soldiers are transitioned out of the Army at given times. This results in a loss of generational knowledge and skill that must be recaptured through time.

- Shifts in focus of the EOD corps

  - As a peacetime force multiplier, the EOD Corps holds many responsibilities that may detract from the emphasis on individual certification due to unanticipated changes in the prescribed mission goals of the EOD Corps.

Currently, U.S. Army EOD Forces are mainly operating in a peacetime role due to decreased requirements for combat-related mission sets. As such, the requirements for certified EOD Team Leaders has reduced, resulting in attrition of potential EOD Team Leaders from the EOD Corps due to reduced operational requirements. Post-conflict force reduction often results

in the disproportionate loss of mid-career soldiers, the primary zone of consideration regarding

prospective EOD Team Leaders.  While the mission requirements are reduced, the primary

intention of any U.S. Army force is the sustainment of operational readiness at a level in which

the U.S. Army can fight and win our nation's wars.

This delicate balance regarding retention of EOD Soldiers is often miscalculated resulting

in requirements for adjustment to the aforementioned training and certification standards to meet

the demands of unanticipated requirements.  The current rate of EOD Team Leader Certified

Soldiers is approximately 35%, which does facilitate the demand of current operational

conditions.  In contrast, the established requirement for EOD Team Leader certified personnel is

70% or greater at all times, indicating that the deficiency in EOD Team Leader certifications is

problematic and requires attention.

## Problem Clarification

To properly clarify the problem of a deficient quantity of U.S. Army EOD Team Leader

certified personnel, this writer will elaborate on the importance of the problem, problem

responsibility, problem scope and frequency, and the organizations and individuals affected by

this problem.  The following detailed analysis of the problem seeks to identify and describe the

factors contributing this problem.

### *Problem Importance*

Due to the life-threating nature of explosive response incidents and the necessity to

protect personnel and property from the effects of explosives, a sufficient amount of certified

EOD Team Leaders is required.  The certification process includes demonstration of EOD

proficiencies to an established and concrete standard.  The responsibility for preservation of life

lies heavily with the EOD Team Leader and as such, must be granted to only those who

demonstrate the capacity to successfully perform under the most stressful and challenging

conditions.

The EOD Team Leader certification process examines the knowledge, skills, and

attitudes of EOD Team Leader candidates through assessments designed to verify the capability

and proficiency of the individual.  A task list of over 70 specified tasks comprises the EOD Team

Leader certification, which is conducted, assessed, and approved of by senior EOD Soldiers.

EOD Soldiers begin this process immediately upon graduation from the Naval School of

Explosive Ordnance Disposal (NAVSCOLEOD) and assignment to the soldier's first operational

organization.  Currently, the U.S. Army EOD Corps possesses a requirement to maintain, at a

minimum, 350 certified EOD Team Leaders to meet the demands of the aforementioned

missions.  The actual number of certified EOD Team Leaders fluctuates between 200 and 300 at

any given time.

Ultimately, the rigorous and challenging nature of the EOD Team Leader certification

process must remain intact to facilitate the production of EOD Team Leaders with the

knowledge, skills, and attitudes required of the position.  Further, the training and educational

processes that lead young EOD Soldiers to final certification must be addressed, with

interventions developed, to ensure a higher rate of success for these soldiers during the

certification process.

### Problem Responsibility

The problem of a deficient population of certified EOD Team Leaders within the U.S.

Army is ultimately the responsibility of the U.S. Army as an organization, but more specifically

the U.S. Army EOD Corps and its subordinate organizations.  The U.S. Navy manages initial

EOD training, serving as a joint institution designed to train all newly acquired EOD Soldiers, Sailors, Airmen and Airwomen, and Marines at NAVSCOLEOD.

Upon completion of initial NAVSCOLEOD training, U.S. Army EOD Soldiers are reassigned to operational units where EOD Team Leader certification training begins immediately.  Operational unit training is prescribed, managed, and tracked by the EOD Corps. Thus, the problem of a deficient population of EOD Team Leader certified personnel is ultimately the responsibility of the EOD Corps.

### Problem Scope and Frequency

U.S. Army EOD Soldiers are actively involved in the aforementioned DSCA and USSS support operations on a daily basis, across the United States.  Further, these soldiers frequently support the USSS during international missions.  EOD Soldiers are also responsible for the safe explosive remediation efforts on every U.S. Army installation (52 installations spanning 31 U.S. States and Territories) as well as U.S. installations existing across 74 international countries (U.S. Army, 2021).

U.S. Army EOD Soldiers are responsible for various types of explosive related incidents including:

- Emergency EOD response operations, involving:
    - Military ordnance
    - High explosives
    - Chemical, Biological, Radiological, and Nuclear explosive devices
- Improvised Explosive Devices (IED), including:
    - Pipe bombs
    - Mail bombs

- o   Vehicle-borne IEDs (VBIED)

- o   Person-borne IEDs (PBIED), also known as suicide bombs

- DSCA LLE support operations, such as:

  - o   Military ordnance discovered in local communities

  - o   All explosive incidents occurring in locations without civilian bomb squads

- USSS Very Important Persons Protection Support Activities (VIPPSA) protecting:

  - o   The President of the United States

  - o   The Vice President of the United States

  - o   Designated U.S. Heads of State

  - o   Foreign Heads of State and esteemed dignitaries

  - o   High-profile national events

Each of these missions occur with varying frequency, but all require the support of at least one U.S. Army EOD Team comprised of one EOD Team Member and one certified EOD Team Leader.  A certified EOD Team Leader, responsible for the entirety of the operation, must lead each EOD mission.  EOD Team Leaders must be properly certified to assume these responsibilities through a rigorous assessment process, which can span several months to years, often resulting in initial failure and an extensive retraining requirement to obtain certification.

***Affected Populations***

Due to the dynamic nature of the EOD mission, regarding the safety and support of various personnel and organizations, the following lists are not all encompassing and represent the primary affected populations.  Further, the effects on the identified populations do not encompass collateral impacts on associated organizations or individuals.  The intent of

describing the affected populations is to illicit thought and understanding of the wide-ranging impacts of the defined problem serving as the focus of this plan.

**Organizations.**

- U.S. Army installations

  o U.S. Army installations experience EOD incidents at varied frequencies. These incidents are categorized as routine and emergency. Routine EOD incidents include discovered unexploded ordnance, typically found on weapons ranges, and remediation of damaged stockpile ordnance. Emergency incidents encompass all incidents that require immediate response by a certified EOD Team Leader due to the imminent threat of injury, death, or damage to critical infrastructure.

- Local Law Enforcement agencies

  o Local Law Enforcement agencies rely on the proficiencies of certified U.S. Army EOD Team Leaders to assist and support in various capacities during law enforcement responses involving explosives and explosive devices.

- Federal Law Enforcement agencies (such as the USSS)

  o Federal Law Enforcement organizations utilize certified EOD Team Leaders in support roles and, in the case of the USSS, in direct protective support to esteemed dignitaries and Heads of State. The criticality of EOD support during these missions cannot be understated and are matters of national security.

**Individuals.**

- U.S. Army Soldiers

  o All U.S. Army Soldiers possess critical skills and specialties relating to their Military Occupational Specialty (MOS). Further, all soldiers are expected to train

in real-world exercises which employ the use of explosives and explosive ordnance. Incidents involving these threats during training events require notification and response by certified EOD Team Leaders, responsible for the safety of all involved personnel on the incident scene.

- Local, State, and Federal Law Enforcement Officers
  - o Law Enforcement Officers are trained to handle countless situations of varying degrees of danger, but do not often possess the specialized skills required to negotiate explosives and explosive devices. While many law enforcement agencies possess organic explosives teams, many do not. Further, when the situation involves military ordnance or explosives, law enforcement explosives specialist are required to inform and cede control of the situation to U.S. Army EOD personnel. These officers rely on the proficiency of certified U.S. Army EOD Team Leaders to ensure personal and public safety.
- Esteemed dignitaries and domestic and foreign Heads of State
  - o The U.S. Government relies on the expertise of certified EOD Team Leaders to protect many esteemed dignitaries including the President and Vice President of the United States as well as foreign dignitaries and Heads of State under the protection of the USSS. These individuals possess a higher probability of becoming a target of explosive devices. EOD forces conduct searches and sweeps of locations intended for the presence of these individuals and must be accomplished, with no error, to avoid degradation of national security.

- U.S. Citizens

  o As members of the U.S. Armed Services, EOD Soldiers are employed by the

    citizens of the United States to protect and defend the nation from all enemies,

    foreign and domestic.  The safety of every citizen involved in an explosive

    incident is the direct responsibility of a certified EOD Team Leader.

## Front-End Analysis Plan

To gain a thorough and intricate understanding the EOD Team Leader certification

deficiency problem, it is imperative to conduct a comprehensive and complete front-end analysis.

Throughout this section, exploration of the performance problem and its contributing factors will

lead to the proper identification of problem causes and the development of potential solutions.

This will be accomplished through the application of an established front-end analysis model and

investigative tools designed to collect information relating to the problem.

## Model Selection

Due to the nature of the defined problem, the model selected to explore it must maintain

several perspectives including the individual soldier, the soldier's environment, available

resources, motivations, capacities, and knowledge.  While countless front-end analysis models

exist that may provide this information, Dr. Thomas Gilbert's Behavior Engineering Model

(BEM) will serve as the model of focus for this performance problem.  The BEM maintains a

strong focus on the environment in which the problem is occurring and lends itself well to this

plan, as the environment of U.S. Army operations is dynamic, and influences all aspects of

soldier performance (Chyung, 2008).

### Dr. Gilbert's BEM

Dr. Thomas Gilbert's book, *Human Competence: Engineering Worthy Performance* introduced the world of human performance studies to the Three Leisurely Theorems (Gilbert, 1978). The third of which, named the management theorem, seeks to understand and manipulate behaviors to elicit enhanced performance (Gilbert, 1978). This theorem evolved into Dr. Gilbert's BEM, a model designed to account for environmental and individual factors viewed from three perspective focused on information, instrumentation, and motivation as seen below in figure 1 (Dalto, 2020).

| | Information | Instrumentation | Motivation |
|---|---|---|---|
| **Environment** | *Data*<br>1. Relevant and frequent feedback about the adequacy of performance<br>2. Descriptions of what is expected of performance<br>3. Clear and relevant guides to adequate performance | *Resources*<br>1. Tools, resources, time and materials of work designed to match performance needs | *Incentives*<br>1. Adequate financial incentives made contingent upon performance<br>2. Non-monetary incentives made available<br>3. Career-development opportunities<br>4. Clear consequences for poor performance |
| **Individual** | *Knowledge*<br>1. Systematically designed training that matches the requirements of exemplary performance<br>2. Placement | *Capacity*<br>1. Flexible scheduling of performance to match peak capacity<br>2. Prosthesis or visual aids<br>3. Physical shaping<br>4. Adaptation<br>5. Selection | *Motives*<br>1. Assessment of people's motives to work<br>2. Recruitment of people to match the realities of situation |

Figure 1. The Behavior Engineering Model (Thomas F. Gilbert, "Human Competence: Engineering Worthy Performance," 1978)

Utilization of Dr. Gilbert's BEM will include analysis of the six factors, as they relate to the individual and the environment. Further, plan-specific questions have been designed, which apply to each of these factors to guide this analysis. These questions can be found in the Procedures section of this report.

### Rationale

Dr. Gilbert's BEM will allow this writer to analyze individual EOD Soldier knowledge, capacity, and motivations to gain understanding of potential limitations and opportunities for

performance enhancement during EOD Team Leader certification processes.  Further, the BEM provides a systematic analysis of the environment of the U.S. Army to advance comprehension of environmental influences contributing to the performance deficit.  The environmental perspectives offered by the BEM will prove valuable during this process, as soldiers are more heavily influenced by their environment within the U.S. Army than any other potential sources. Lastly, the BEM offers the diverse perspectives, across individual and environmental realms, required for analysis of this specific performance problem (Chyung, 2008).

**Tool Selection and Application**

The investigative tools used in this front-end analysis will serve in a supporting role to the model and the questions designed around Dr. Gilbert's BEM.  While supportive in nature, the tools used to collect data are just as relevant and valuable to the process as the model itself.  To properly capture the required and pertinent data, the tools selected for use must provide a comprehensive understanding of the perspectives associated with the actual model.  Further, these tools must closely align with U.S. Army procedures and protocols as well as soldier-centric perspectives.

U.S. Army training is prescriptive in nature and already accounts for the information passed to learners.  Further, methods such as surveys and interviews of soldiers will likely provide depth regarding motivations and the post-NAVSCOLEOD learning environment while analysis of the EOD Team Leader certification system will clarify any issues within the institutions of learning.  The selected tools, explained below, will allow investigation of the environment (EOD Team Leader certification system) and the individual (prospective EOD Team Leader).

***Organizational Learning Climate Survey***

EOD Soldiers receive their initial training prior to assignment within an operational EOD organization. Once assigned, a more specific individual training plan is implemented, focused on shaping and honing the requisite skills, knowledge, and attitudes of an EOD Team Leader. This organizational training environment is dynamic and includes classroom study, practical application, and frequent interactions with certified EOD Team Leaders to develop a deeper understanding of EOD Team Leader competencies and responsibilities.

The EOD Organizational Learning Climate Survey (EOD-OLCS) is a survey, adapted from learning climate surveys, focused on the Army EOD organization's climate of EOD Team Leader certification training programs. The questions on the survey are designed to elicit responses that indicate levels of concurrence with statements, from prospective EOD Team Leaders, to ascertain their perspectives of the environment with a concentric focus on the interactions between learners and trainers and evaluators. Respondents to this survey must be involved in the organization's EOD Team Leader certification training path and must be briefed, prior to delivery of the survey, that all responses will remain confidential. The EOD-OLCS designed for this project can be viewed in Appendix I of this report.

***OLCS Rationale***

The rationale behind the use of the EOD-OLCS in this plan is that it provides analysists with the perspective of the learner while also considering environmental influences placed upon the learner during training. Further, this survey's questions, designed for specific use in EOD training environments, aim to answer the questions derived from application of Dr. Gilbert's BEM, as stated in the table located in the Procedures section of this report. Finally, the EOD-OLCS will allow analysts to differentiate amongst several alternative EOD Team Leader

certification trainers and evaluators to better ascertain any discrepancies involved with the knowledge, skills, or attitudes of these individuals and their influences on prospective EOD Team Leaders.

### Intrinsic Motivation Inventory

The Intrinsic Motivation Inventory (IMI) is a tool designed to enhance the understanding of the motivations of individuals resulting from internal processes, such as cognition, beliefs, morals, and ethics.  The IMI derives the extent of the individual's levels of motivations as they pertain to three categories, interest and enjoyment, value and usefulness, and the perception of choice.  These three categories help to inform analysts of the distinct motivators that exist within the individual learner, while providing perspectives on environmental motivations, as viewed by the learner.

The EOD Intrinsic Motivation Inventory (EOD-IMI) used for this project was designed with a concentric focus on the process of EOD Team Leader certification and training within an EOD organization.  The questions are tailored as statements that respondents reply to by indicating the truthfulness or falseness of the given statement, as it pertains to their individual perspective.  The twenty-one questions within the EOD-IMI are divided evenly amongst the three aforementioned categories and are scored, resulting in a numeric value of motivation levels across these categories.  The Prospective EOD Team Leader IMI designed for this project can be viewed in Appendix II of this report.

### IMI Rationale

The rationale behind the choice of the EOD-IMI is that it serves multiple purposes, which contribute to gathering information in support of the BEM used for this project.  The dual-perspective approach of the BEM, focused on individuals and environments, allows the EOD-

IMI to discern the motivational views of prospective EOD Team Leaders in relation to themselves and their surroundings. Ultimately, the EOD-IMI will inform analysts of how the environment shapes the intrinsic motivations of its learners, while also contributing an alternative perspective of environmental motivational factors, as viewed by the learners.

**Procedures**

The procedures used in this front-end analysis plan begin with data collection efforts focused on the responses to the EOD-OLCS and EOD-IMI. Following data collection, the Methodology section of this plan explains the correlations existing between the EOD-OLCS, EOD-IMI, and BEM. In addition, the collected information, framed by the BEM, will result in questions designed to identify potential causes and solutions existing within the environment and the individual. Finally, schematic flowcharts were developed to explore these questions, resulting in the diagnosis of potential causes and solutions, within the perspectives of the environment and individual skills, knowledge, and attitudes.

*Data Collection*

With the problem of focus for this project existing within a regimented and strict process of a U.S. Army training environment, typical data such as failure and success rates, training construction, and curriculum development is the result of prescribed education and training. This prescribed education and training is universal for all prospective EOD Team Leaders and has proven to be successful in educating EOD Soldiers. Therefore, the focus for data collection should remain with the variable that fluctuates the most, in this case, the individual soldier. Data collection for this report will utilize the EOD-OLCS and EOD-IMI to assess the following.

- Relationships between EOD Team Leaders and their learners
- Attitudes of prospective EOD Team Leaders

- Perspective of the training environment, as viewed by the learners

- Levels of learner motivation

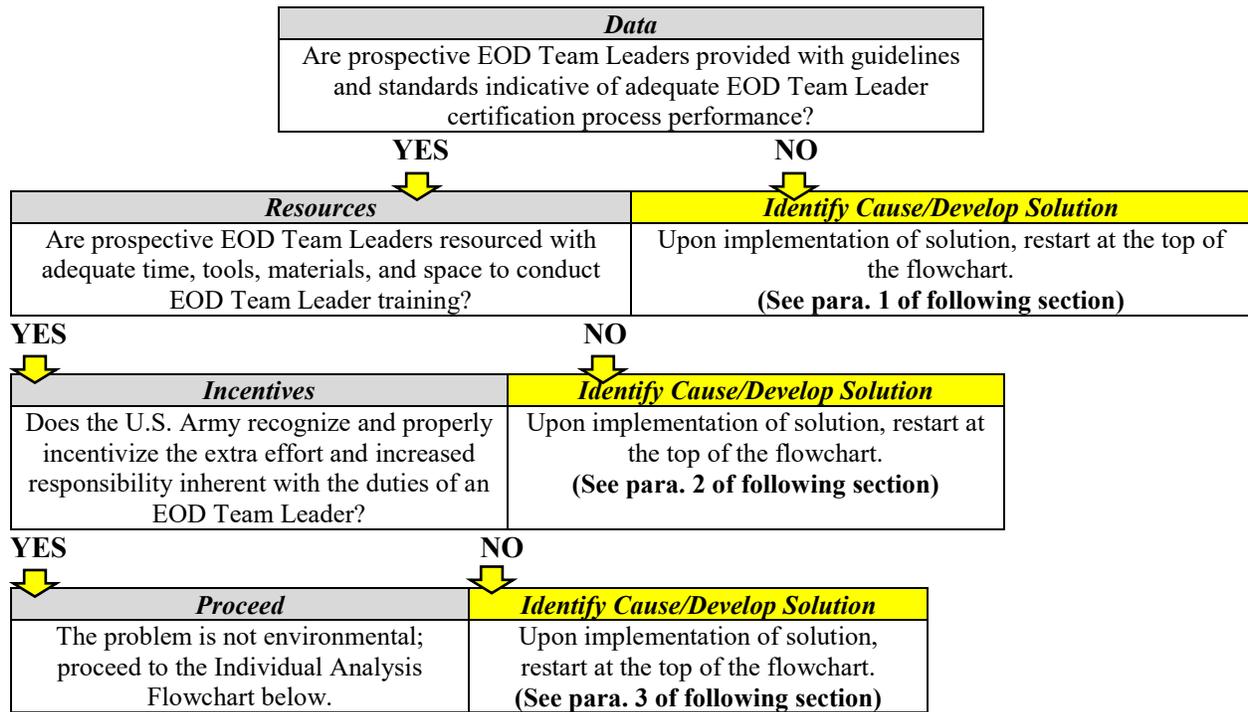- Understanding of the environmental motivations as perceived by the learners

*Methodology*

In conjunction with the EOD-OLCS and EOD-IMI, framed through the application of Dr. Gilbert's BEM, this plan will focus on answering the questions listed in the table and flowcharts below. Further, through the utilization of information derived from administration of the selected tools, analysts will be able to follow the flowcharts to arrive at potential solutions to the problem of less than desirable levels of certified EOD Team Leaders within the U.S. Army.
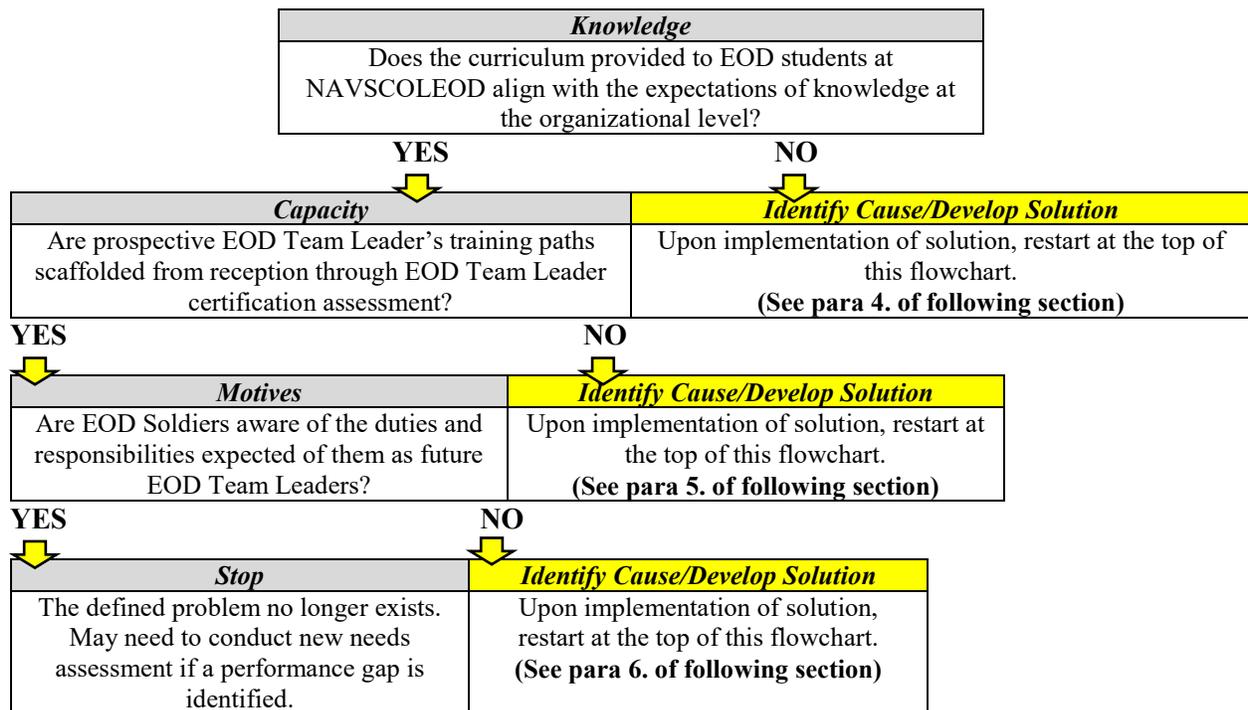
The first step of this process is to administer the prescribed analytic tools, the EOD-OLCS and EOD-IMI, across the U.S. Army's population of prospective EOD Team Leaders. Upon receipt of responses to these tools, analysts must seek to compile the information and gain understanding regarding the commonalities existing amongst respondents. Once commonalities have been established, and analysts have gained a thorough understanding of the perspectives of prospective EOD Team Leaders, they can proceed with progressing through the flow chart below, framed by the following questions derived from the BEM.

| ENVIRONMENT | INDIVIDUAL |
|---|---|
| *Data* | *Knowledge* |
| Are prospective EOD Team Leaders provided with guidelines and standards indicative of adequate EOD Team Leader certification process performance? | Does the curriculum provided to EOD students at NAVSCOLEOD align with the expectations of knowledge at the organizational level? |
| **Note**-Utilize EOD-OLCS and EOD-IMI responses to focus a data/content analysis of organizational curriculum, doctrine, regulation, and policy. | **Note**-Utilize EOD-OLCS and EOD-IMI responses to focus a data/content analysis of NAVSCOLEOD curriculum, doctrine, regulation, and policy. |
| *Resources* | *Capacity* |
| Are prospective EOD Team Leaders resourced with adequate time, tools, materials, and space to conduct EOD Team Leader training? | Are prospective EOD Team Leader's training paths scaffolded from reception through EOD Team Leader certification assessment? |
| *Incentives* | *Motives* |
| Does the U.S. Army recognize and properly incentivize the extra effort and increased responsibility inherent with the duties of an EOD Team Leader? | Are EOD Soldiers aware of the duties and responsibilities expected of them as future EOD Team Leaders? |

## *Environmental Analysis Flowchart*

| **Data** |
| --- |
| Are prospective EOD Team Leaders provided with guidelines and standards indicative of adequate EOD Team Leader certification process performance? |

**YES** →      **NO** →

| **Resources** | **Identify Cause/Develop Solution** |
| --- | --- |
| Are prospective EOD Team Leaders resourced with adequate time, tools, materials, and space to conduct EOD Team Leader training? | Upon implementation of solution, restart at the top of the flowchart. **(See para. 1 of following section)** |

**YES**        **NO**

| **Incentives** | **Identify Cause/Develop Solution** |
| --- | --- |
| Does the U.S. Army recognize and properly incentivize the extra effort and increased responsibility inherent with the duties of an EOD Team Leader? | Upon implementation of solution, restart at the top of the flowchart. **(See para. 2 of following section)** |

**YES**        **NO**

| **Proceed** | **Identify Cause/Develop Solution** |
| --- | --- |
| The problem is not environmental; proceed to the Individual Analysis Flowchart below. | Upon implementation of solution, restart at the top of the flowchart. **(See para. 3 of following section)** |

## *Individual Analysis Flowchart*

| **Knowledge** |
| --- |
| Does the curriculum provided to EOD students at NAVSCOLEOD align with the expectations of knowledge at the organizational level? |

**YES** →      **NO** →

| **Capacity** | **Identify Cause/Develop Solution** |
| --- | --- |
| Are prospective EOD Team Leader's training paths scaffolded from reception through EOD Team Leader certification assessment? | Upon implementation of solution, restart at the top of this flowchart. **(See para 4. of following section)** |

**YES**        **NO**

| **Motives** | **Identify Cause/Develop Solution** |
| --- | --- |
| Are EOD Soldiers aware of the duties and responsibilities expected of them as future EOD Team Leaders? | Upon implementation of solution, restart at the top of this flowchart. **(See para 5. of following section)** |

**YES**        **NO**

| **Stop** | **Identify Cause/Develop Solution** |
| --- | --- |
| The defined problem no longer exists. May need to conduct new needs assessment if a performance gap is identified. | Upon implementation of solution, restart at the top of this flowchart. **(See para 6. of following section)** |

**Causes and Solutions**

As identified through analysis and progression through the BEM-based flowcharts, the following possible problem causes and potential solutions may serve to close the identified performance gap.

*Environmental*

1. **Problem:** Prospective EOD Team Leaders are not provided with guidelines and standards indicative of adequate EOD Team Leader certification process performance. A content and document analysis of organizational curriculum, doctrine, regulations, and policies, focused through responses to the EOD-IMI, will allow for a more precise identification of the problem.

   **Possible Cause:** Potentially, an organizational failure to construct and publish a comprehensive document establishing the duties and responsibilities of prospective EOD Team Leaders, focused on EOD Team Leader certification, may exist.

   **Potential Solution:** Organizations must utilize subject-matter experts (SME) to identify and codify a standard operating procedure, which outlines the duties and responsibilities of prospective EOD Team Leaders. The EOD-IMI and EOD-OLCS will provide a focus for content and data analysis efforts to support product development. These analyses will serve to confirm the existence of established guidelines and organizational policies. Organizations must also ensure the widest possible dissemination of the developed product amongst the organization through the creation and application of policy. This product should be delivered as required reading.

2. **Problem:** Prospective EOD Team Leaders are not resourced with adequate time, tools, materials, and space to conduct EOD Team Leader training.

**Possible Cause:** A potential misallocation of funds, resources, and equipment intended for EOD Team Leader certification training may exist.

**Potential Solution:** Organizations should identify and segregate appropriate equipment for all prospective EOD Team Leaders to utilize during training.  Further, organizations must attempt to allocate organizational funds towards the purchase, maintenance, and replacement of lost, broken, or antiquated equipment as well as the procurement of other resources and expendable items.

3. **Problem:** The U.S. Army does not recognize and properly incentivize the extra effort and increased responsibility inherent with the duties of an EOD Team Leader.

   **Possible Cause:** Monetary incentives may have not been proposed or properly substantiated to Army budget officials and non-monetary incentives are not being made available or utilized by the organization.

   **Potential Solution:** EOD Corps proponents should develop a proposal, in concert with organizational SMEs, for presentation to Army budget officials, describing the importance of EOD Team Leader population maintenance and proposed incentives. Further, organizations should explore the use on non-monetary incentives for certified EOD Team Leaders.

*Individual*

4. **Problem:** The curriculum provided to EOD students at NAVSCOLEOD does not align with the expectations of knowledge at the organizational level.  A content and document analysis of NAVSCOLEOD curriculum, doctrine, regulations, and policies, focused through responses to the EOD-IMI, will allow for a more precise identification of the problem.

**Possible Cause:** Individual knowledge development at the organizational level may not be occurring or appropriately pursued by individuals.

**Potential Solution:** Organizations should establish study requirements, outlined by required organizational and operational EOD knowledge, to expand upon the base of knowledge established at NAVSCOLEOD. The EOD-IMI and EOD-OLCS will provide a focus for content and data analysis efforts to support the design of study plans. In addition, organizations should create and manage study plans for each individual soldier.

5.  **Problem:** Prospective EOD Team Leader's training paths are not scaffolded from reception through EOD Team Leader certification assessment.

    **Possible Cause:** The organizational EOD Team Leader development pipeline may not be structured in a sequential or progressive fashion, resulting in skill and knowledge gaps.

    **Potential Solution:** Organizations should review and adjust EOD Team Leader training paths to ensure sequential and progressive methodology pertaining to EOD Team Leader development. Further, organizational leadership must support newly presented information with previously acquired knowledge and skills that may be built upon.

6.  **Problem:** EOD Soldiers are not aware of the duties and responsibilities expected of them as future EOD Team Leaders.

    **Possible Cause:** A potential lack of organizational communication to inform individuals of prospective EOD Team Leader duties and responsibilities may exist. Further, individual interest in gaining understanding of EOD Team Leader duties and responsibilities may be understated.

    **Potential Solution:** Organizations must develop counseling sessions to inform and elaborate upon the duties and responsibilities of prospective EOD Team Leaders, entering

the EOD Team Leader training pipeline, for delivery upon organizational reception with

periodic follow-ups.  In addition, organizational leadership should emphasize the

importance and criticality of early EOD Team Leader knowledge, skill, and attitude

understanding in order to prepare prospective EOD Team Leaders for training and

development.

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## Appendix I: EOD OLCS

This survey contains items that are related to your experience with your EOD Team Leader certification trainers and evaluators. Trainers and evaluators have different styles in dealing with prospective EOD Team Leaders, and gaining perspective regarding your encounters with your trainers and evaluators is imperative to the development of the EOD Team Leader certification Program. Please provide substantiating comments for "Strongly Disagree" and "Strongly Agree" responses. Your responses are confidential. Please be honest and candid.

**1. I feel that my trainer/evaluator provides me choices and options during EODTLC training, so that I may learn from my successes and failures.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**2. I feel that my current and potential capabilities are understood and considered by my trainer/evaluator.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**3. I am able to be open and engage freely regarding questions and my own ideas and perspectives with my trainer/evaluator during training events.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**4. My trainer/evaluator has conveyed confidence in my ability to succeed as an EOD Team Leader.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**5. I feel that my trainer/evaluator is accepting of the possibility that I may become a certified EOD Team Leader.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**6. My trainer/evaluator makes every effort to ensure I understand the goal of EODTLC training events and my responsibilities during evaluations.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**7. My trainer/evaluator encourages me to ask questions and to gain clarification of procedures during training events.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**8. I trust the subject-matter expertise and guidance of my trainer/evaluator.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**9. My trainer/evaluator answers my questions fully and carefully.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**10. My trainer/evaluator considers my ideas and perspectives prior to offering alternative solutions.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**11. My trainer/evaluator properly handles my emotional responses to stress.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**12. I feel that my trainer/evaluator cares about my progress towards EODTL certification.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**13. I do not appreciate the way my trainer/evaluator interacts with me.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**14. I feel able to share my concerns with my trainer/evaluator.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**15. My trainer/evaluator constructively highlights my successes and failures.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |
| | | | | | | |

**16. I have received guidelines and standards indicating adequate EOD TL Performance.**

| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Substantiating Comments:** | | | | | | |

**Appendix II: EOD IMI**

| Question | Always False | Often False | Sometimes False | Sometimes True | Often True | Always True |
|---|---|---|---|---|---|---|
| **1.** I believe that becoming an EOD Team Leader is of value to me. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **2.** I believe I have choices about becoming an EOD Team Leader. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **3.** While completing EOD Team Leader training events, I found my efforts to be rewarding. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **4.** I believe that becoming an EOD Team Leader is a personal aspiration of my own. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **5.** I have no choice regarding my training path as a prospective EOD Team Leader. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **6.** I want to become an EOD Team Leader. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **7.** EOD Team Leader training is rewarding and beneficial to me. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **8.** I find little interest in EOD Team Leader training. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **9.** EOD Team Leader training and certification is merely a requirement of my chosen profession. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **10.** I find personal satisfaction in EOD Team Leader training. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **11.** I know that EOD Team Leader training will provide me with benefits beyond my service as a soldier and into my civilian life. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **12.** EOD Team Leader certification is an honor and a privilege. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **13.** EOD Team Leader certification is merely a matter of normal career progression. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **14.** EOD Team Leader certification weighs/will weigh heavily in my decisions to reenlist for future contracts of service. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **15.** The topics, procedures, and methods learned during EOD Team Leader training events are interesting to me. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **16.** The choices I make now will have an impact on the rest of my EOD career and beyond my service as a soldier. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |

| | | | | | |
|---|---|---|---|---|---|
| **17.** The EOD Team Leader training path is rigid and my choices or opinions regarding my progression through it are of no concern. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **18.** I have no choice regarding my career progression as an EOD Soldier. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **19.** If successful in becoming a certified EOD Team Leader, I know that my job will be more enjoyable and rewarding. | 1 ☐ | 2 ☐ | 3 ☐ | 4 ☐ | 5 ☐ | 6 ☐ |
| **20.** My choices regarding my EOD Team Leader training progression are not my own. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **21.** Because I volunteered to become an EOD Soldier, I have no choices remaining regarding the MOS I will perform for the rest of my career as a soldier. | 6 ☐ | 5 ☐ | 4 ☐ | 3 ☐ | 2 ☐ | 1 ☐ |
| **Totals** | **Interest/Enjoyment** | | **Value/Usefulness** | | **Perceived Choice** | |
| | | | | | | |

## Scoring information:

The inventory questions are assigned to the one of three groupings, as indicated in the table below. Inventory administrators will add the scores of the grouped questions and enter the sum in the corresponding block in the "totals" section of the inventory. Negatively formatted questions have been reversed scored in the inventory for proper evaluation.

| Category | Questions |
|---|---|
| Interest and Enjoyment | 3, 6, 8, 10, 12, 15, & 19 |
| Value and Usefulness | 1, 4, 7, 9, 11, 13, & 14 |
| Perception of Choice | 2, 5, 16, 17, 18, 20, & 21 |