INVITATION TO BID

Bid Invitation Number: **2-2013** Date of Issue: **01/22/2013**

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on **02/05/2013**. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

Division of Central Purchasing
200 East Main Street, Room 338
Lexington, KY 40507, (859) 258-3320

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

All bids must have the company name and address, bid invitation number, and the commodity/service on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: 159 E. Main St., Lexington, KY 40507

Bid Security Required: ___Yes X No Performance Bond Required: ___Yes X No
Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).

Commodity/Service
Advanced Ordnance Recognition Training
See specifications

Check One:		**Proposed Delivery:**
___	Bid Specifications Met	
XX	Exceptions to Bid Specifications. *Exceptions shall be itemized and attached to bid proposal submitted.*	60 days after acceptance of bid.

Procurement Card Usage

XX Yes The Lexington-Fayette Urban County Government will be using Procurement Cards to
___ No purchase goods and services and also to make payments. Will you accept Procurement Cards?

Submitted by: Texas A&M Engineering Extension Service (TEEX)
Firm
PO Box 40006
Address
College Station, TX 77842-4006
City, State & Zip

Bid must be signed: (original signature)

Signature of Authorized Company Representative – Title
Sue Shahan
Representative's Name (Typed or printed)
(979) 458-6801 (979) 862-5051
Area Code - Phone – Extension *Fax #*
sue.shahan@teex.tamu.edu
E-Mail Address

The Affidavit in this bid must be completed before your firm can be considered for award of this contract.

Print Form

THE TEXAS A&M UNIVERSITY SYSTEM
System Risk Management

10/31/11

Texas Engineering Extension Service

To Whom It May Concern:

The above-mentioned Member of the Texas A&M University System has requested we provide you with information regarding the insurance provisions of The Texas A&M University System.

The Texas A&M University System is self-insured for Workers' Compensation Insurance provided by Chapter 502 of the Texas Labor Code. Benefits are provided in accordance with the provisions of that law.

State-owned vehicles of universities and agencies of the Texas A&M University System are exempt from compulsory liability insurance requirements of the State of Texas. This exemption appears in Subtitle D Motor Vehicle Safety Responsibility; Chapter 601 Motor Vehicle Safety Responsibility Act; Subchapter A General Provisions; Section 007 Applicability of Chapter to Government Vehicle.

The liability of The Texas A&M University System for personal injury and property damage is controlled by the Texas Tort Claims Act, V.T.C.A. Civil Practice and Remedies Code, Chapter 101, Section 101.021. The limits of liability are $250,000 for each person, $500,000 for each single occurrence for bodily injury or death and $100,000 for each single occurrence for injury to or destruction of property. Following this limited exposure, the System as a state agency, is protected by the doctrine of sovereign immunity, and as such, is self-insured up to the aforementioned limits.

We trust the above information will provide the necessary insurance information needed by your organization. If we can be of any further assistance, please let us know.

Sincerely,

Henry D. Judah, CPCU CLU ChFC
Risk Manager

200 Technology Way, Suite 1120 • College Station, Texas 77845-3424
979.458.6330 • 979.458.6247 fax • www.tamus.edu Campus MS 1262

Lexington-Fayette Urban County Government
DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray
Mayor

William O'Mara
Acting Commissioner

ADDENDUM #1

Bid Number: **#2-2013**

Date: January 30, 2013

Subject: Advanced Ordnance Recognition Training

Address inquiries to:
Theresa Maynard
(859) 258-3320

TO ALL PROSPECTIVE BIDDERS:

Please be advised of the following clarification to specifications of the above referenced quote. The following item has been removed from the specification:

- **Successful completion of the course will certify student to level of UXO-Tech 1**

Todd Slatin, Acting Director
Division of Central Purchasing

All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.

BID OF: Texas Engineering Extension Service (TEEX)

ADDRESS: 200 Technology Way College Station, TX 77845

SIGNATURE OF BIDDER: Ed Brickley

AFFIDAVIT

Comes the Affiant, Sue Shahan, and after being first duly sworn under penalty of perjury as follows:

1. His/her name is Sue Shahan and he/she is the individual submitting the bid or is the authorized representative of

Texas A&M Engineering Extension Service (TEEX),

the entity submitting the bid (hereinafter referred to as "Bidder").

2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Bidder has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.

6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

_____

STATE OF Texas

COUNTY OF Brazos

The foregoing instrument was subscribed, sworn to and acknowledged before me

by Sue Shahan on this the 25th day

of January, 2013.

My Commission expires: 6/30/2016

Elaine Allen
My Commission Expires
06/30/2016

Elaine Allen
NOTARY PUBLIC, STATE AT LARGE

Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.

EQUAL OPPORTUNITY AGREEMENT

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.

- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.

- Section 503 of the Rehabilitation Act of 1973 states:

  The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.

- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

  The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

****

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.

Signature _____ Texas A&M Engineering Extension Service (TEEX)

Name of Business

TEXAS ENGINEERING EXTENSION SERVICE
Office of the Director

TRAIN • SERVE • RESPOND

John B. Connally Building • 301 Tarrow • College Station, TX 77840-7896
Toll-free (877) 833-9638 • Phone (979) 458-6800 • Fax (979) 458-6829 • www.teex.org

February 9, 2012

MEMORANDUM

TO: Texas Engineering Extension Service Employees

FROM: Gary Sera
Director

SUBJECT: Reaffirmation of Commitment to Equal Employment Opportunity, Access and Affirmative Action

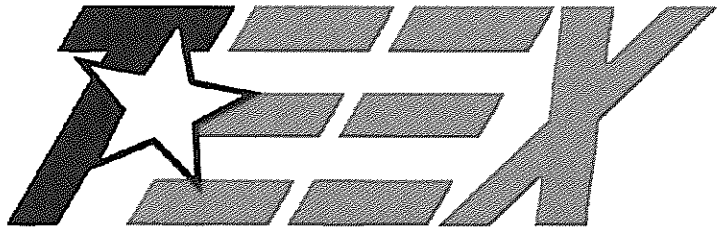
Fellow TEEXans,

We at TEEX embrace Equal Opportunity, Access and Affirmative Action. We are committed to providing a work environment that is conducive to the personal and professional development of each employee without regard to gender, race, national origin, religion, age, disability, or veteran status. In addition, equal opportunity and access will be provided to all students, employees and prospective employees.

As TEEXans, we are all responsible for achieving an equal opportunity environment as well as the development of a dynamic and diverse workforce that possesses the expertise to serve our constituents.

If any employee feels that they are being discriminated against for any of the above reasons, the employee should contact the Human Resources Manager immediately. Any form of discrimination or retaliation against the employee will not be permitted.

Name: Brian Payne
Title: Human Resources Manager
Phone: 979-458-6845
Email: Brian.Payne@teexmail.tamu.edu



Texas Engineering Extension Service

A Member of the Texas A&M University System

2012 Affirmative Action Plan

EXECUTIVE ORDER 11246 AFFIRMATIVE ACTION PLAN (AAP)

TEXAS ENGINEERING EXTENSION SERVICE
A MEMBER OFTHE TEXAS A&M UNIVERSITY SYSTEM

01/01/2012 – 12/31/2012

PART I: AAP FOR MINORITIES AND WOMEN

PART II: AAP FOR COVERED VETERANS AND INDIVIDUALS WITH A DISABILITY

AA/EEO Contact: Brian Payne
Human Resources Manager
Texas Engineering Extension Service
200 Technology Way
College Station, TX 77845
(979) 845-6845

TEXAS ENGINEERING EXTENSION SERVICE AAP

TABLE OF CONTENTS

PARTS I AND II

INTRODUCTION TO PARTS I AND II

BACKGROUND

The Texas Engineering Extension Service (TEEX) is a federal government supply and service contractor subject to the affirmative action requirements of Executive Order 11246, the Rehabilitation Act of 1973 as amended, and the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended. Because TEEX has $50,000 or more in annual contracts with the federal government and employs 50 or more employees, we are required to prepare annual written Affirmative Action Plans (AAP's) for minorities and women, for covered veterans, and for individuals with a disability. Failure to comply with these laws and their implementing regulations, which are enforced by the Office of Federal Contract Compliance Programs (OFCCP), can result in debarment of the university from future contracts and subcontracts.

Affirmative Action is a term that encompasses any measure adopted by an employer to correct or to compensate for past or present discrimination or to prevent discrimination from recurring in the future. Affirmative Action goes beyond the simple termination of a discriminatory practice.

As stipulated in federal regulations, a prerequisite to the development of a satisfactory Affirmative Action Plan is the evaluation of opportunities for the representation of protected group members, as well as an identification and analysis of problem areas inherent in their employment. Also, where a statistical analysis of the employee workforce reveals a percentage under-representation of minorities or women, greater than would reasonably be expected by their availability, an adequate AAP details specific affirmative action steps to ensure equal employment opportunity. These steps are keyed to the problems and needs of protected group members. For minorities and women, such steps include the development of goals to rectify under-representation where found. It is toward this end that the following Affirmative Action Plan for TEEX was developed.

APPLICABLE AFFIRMATIVE ACTION LAWS AND REGULATIONS

TEEX AAP for minorities and women (Part I) has been prepared according to Executive Order No. 11246, as amended, and Title 41, Code of Federal Regulations, Part 60-1 (Equal Employment Opportunity Duties of Government Contractors), Part 60-2 (Affirmative Action Programs of Government Non-Construction Contractors; also known as "Revised Order No. 4"), and Part 60-20 (Sex Discrimination Guidelines for Government Contractors). TEEX has developed separately an Affirmative Action Plan for covered veterans and individuals with a disability (Part II) prepared in accordance with the Rehabilitation Act of 1973, Section 503, as amended; Title 41, Code of Federal Regulations, Part 60-741 (Affirmative Action Program for Individuals with Disabilities); the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended; 38 U.S.C. Section 4212, as amended; and Title 41 of the Code of Federal Regulations, Part 60-300 (Affirmative Action Program for Covered Veterans).

The Veterans Employment Opportunities Act of 1998 (VEOA), Public Law 105-339, effective October 31, 1998, increased the threshold for coverage under VEVRAA from a contract of $10,000 or more to a contract of $25,000 or more; extended the law's protections to "veterans who served on active duty during a war or in a campaign for which a campaign badge was authorized"; and, provides temporary (up to one year) protection to veterans who do not have a service connected disability, did not see action in a foreign war and did not serve during the Vietnam era.

The Jobs for Veterans Act (JFVA), Public Law 107-288, effective December 1, 2003, increased the threshold for coverage under 38 U.S.C. §4212 from $25,000 to $100,000; grants VEVRAA protection to those veterans who, while serving on active duty in the Armed Forces, participated in a United States military operation for which an Armed Forces service medal was awarded pursuant to Executive Order 12985 (62 Fed. Reg. 1209); changes the definition of "recently separated veteran" to include "any veteran during the three-year period beginning on the date of such veteran's discharge or release from active duty"; changes "Special Disabled Veterans" to "Disabled Veterans," expanding the coverage to conform to 38 U.S.C. § 4211 (3); and, following publication of the final regulations, requires contractors to post job listings with their local employment service delivery system.

PROTECTED GROUPS

Coverage under affirmative action laws and regulations applies to:

Women and minorities who are recognized as belonging to or identifying with the following race or ethnic groups: Blacks/African Americans, Hispanics/Latinos, Asians, Native Hawaiian/Pacific Islanders, American Indians/Alaskan Natives, and two or more races.

Any veteran who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Secretary of Veterans Affairs, or who was discharged or released from active duty because of a service-connected disability.

Recently separated veterans: any veteran currently within three-years of discharge or release from active duty.

Veterans who received an "Armed Forces Service Medal."

Other protected veterans who served on active duty in the U.S. military, ground, naval, or air service during a war or in a campaign or expedition for which a campaign badge has been authorized, under the laws administered by the Department of Defense.

An individual with a disability: 1) a person who has a physical or mental impairment that substantially limits one or more of his/her major life activities; (2) has a record of such impairment, or (3) is regarded as having such impairment.

PROGRAM TERMINOLOGY

The terms, "comparison of incumbency to availability" and "problem area" appearing in this AAP are terms TEEX is required by government regulations to use. The criteria used in relation to these terms are those specified by the government. These terms have no independent legal or factual significance whatsoever. Although TEEX will use the terms in total good faith in connection with its AAP, such use does not necessarily signify that the agency agrees that these terms are properly applied to any particular factual situation and is not an admission of non-compliance with EEO laws, regulations, and objectives.

The comparison of incumbency to availability contained herein is required by Government regulations to be based on certain statistical comparisons. Geographic areas and sources of statistics used herein for these comparisons were used in compliance with government regulations, as interpreted by government representatives. The use of certain geographic areas and sources of statistics does not indicate TEEX 's agreement that the geographic areas are appropriate in all instances of use or that the sources of statistics are the most relevant. The use of such geographic areas and statistics may have no significance outside the context of this AAP. Such statistics and geographic areas will be used, however, in total good faith with respect to this AAP.

The grouping of job titles into a given job group does not suggest that TEEX believes the jobs so grouped are of comparable worth.

Whenever the term "goal" is used, it is expressly intended that it "should not be used to discriminate against any applicant or employee because of race, color, religion, gender, or national origin," as stated in Title 41 Code of Federal Regulations, Part 60-2.16(e)(2).

This AAP is not intended to create any contractual or other rights in any person or entity.

RELIANCE ON EEOC'S GUIDELINES

Although TEEX does not believe any violation of Title VII of the Civil Rights Act exists, it has developed this AAP in accordance with and in reliance upon the EEOC's Guidelines on Affirmative Action, Title 29 Code of Federal Regulations, Part 1608.

REPORTING PERIOD

This AAP is designed to cover the following reporting period: 01/01/2012 – 12/31/2012.

STATEMENT OF PURPOSE FOR PARTS I AND II

This AAP has been designed to bring women and men, members of minority groups, covered veterans, and individuals with a disability into all levels and segments of TEEX's workforce in proportion to their representation in the qualified relevant labor market.

The AAP, therefore, is a detailed, results-oriented set of procedures which, when carried out, results in full compliance with equal employment opportunity requirements for full representation and equal treatment of all people.

The manner in which this is to be accomplished becomes technical and somewhat complicated. There are several reasons for this. First, TEEX is subject to and must address a variety of state and federal laws and guidelines dealing with equal employment opportunity and affirmative action. These guidelines and requirements are in themselves somewhat technical and complex. In addition, relevant court decisions, which are often useful in interpreting, but sometimes conflict with, these requirements and guidelines must be taken into account when developing and implementing the AAP. Furthermore, in determining TEEX's current equal employment opportunity and affirmative action position and its desired future achievements, numbers, percentages, statistics, and numerous calculations and computations must come into play.

The technical, legal, and mathematical aspects of the AAP, however, all have one common purpose—to allow us to properly identify three key concepts:

1. Where we stand now,
2. Where we must go,
3. How best to get there.

These three concepts <u>are</u> the Affirmative Action Plan.

Standard Administrative Procedures

Workers' Compensation TEEX 24.01.02.99-1
Approved March 8, 2006
Revised March 21, 2006
Revised June 22, 2007
Revised June 10, 2008
Supplements System Policy 24.01 and System Regulation 24.01.02

GENERAL:
Workers' Compensation is a form of insurance designed to provide medical payments and, in some cases, income benefits to employees who suffer injuries, occupational diseases, or work-related death in the course and scope of their TEEX employment.

A monetary penalty may be assessed by the Texas Department of Insurance against the employer for failure to file required forms on time or failure to maintain a record of forms submitted to the A&M System Office of Risk Management and Safety. A $25,000.00 per day fine may be assessed for repeat violations.

Employees are responsible for reporting on-the-job injuries and occupational diseases to their supervisor. Supervisors are responsible for reporting on-the-job injuries and occupational diseases to Human Resources. Human Resources is responsible for reporting on-the-job injuries and occupational diseases to the A&M System Office of Risk Management and Safety. Human Resources is also responsible for maintaining a record of reported on-the-job injuries and occupational diseases.

Injured or ill employees can seek medical attention from a physician of their choice. However, the physician must accept workers' compensation.

PROCEDURES:
1. Employee sustains an on-the-job injury or occupational disease and immediately notifies supervisor.
    a. If a 911 call is necessary, or injury or illness results in employee death, notify Division Director or Associate Division Director and Human Resources immediately.
2. If necessary, employee receives medical attention and submits Texas Workers' Compensation Work Status Report (provided by physician) signed by physician to Human Resources as soon as possible.
3. Supervisor completes and submits *Employers First Report of Injury or Illness* to Human Resources within 24 hours of injury or illness.
4. Supervisor collects and submits *Supplemental Witness Statement for First Report of Injury* Human Resources within 36 hours of injury or illness.

5. If injury or illness occurred due to an accident, follow *Health and Safety Standard Administrative Procedure*
    a. *Accident Investigation Report*
    b. *Motor Vehicle Accident Report*
6. If work status report shows employee is released to return to work with restrictions, notify Human Resources and follow Early Return to Work Standard Administrative Procedure.

OFFICE OF RESPONSIBILITY: Human Resources

TEXAS A&M ENGINEERING
TEEX
EXTENSION SERVICE

Advanced Ordnance Recognition for Law Enforcement Course

Bid:
In response to Bid Invitation #2-2013, the Texas A&M Engineering Extension Service (TEEX) is pleased to offer the Lexington-Fayette Urban County Government a single delivery of the Advanced Ordnance Recognition for Law Enforcement (AORLE) course for 20 to 25 participants.

TEEX:
The Texas A&M Engineering Extension Service (TEEX) is an internationally recognized leader in the delivery of safety, security and disaster management training. Additionally, TEEX provides workforce training, exercises, technical assistance and technology transfer throughout the United States. The agency offers a wide range of hands-on, customized training solutions impacting the occupational and economic development of Texas and beyond. Major programs include public safety & security, fire services, homeland security, public works, health & environmental, search & rescue and economic solutions.

Between September 1, 2011, and August 31, 2012, TEEX provided training and technical assistance to more than 183,750 people from all 50 states, five U.S. territories, the District of Columbia and 79 countries. Additionally, TEEX has been providing Explosives Safety Training since 1998 conducting an average of 14 classes for approximately 300 students annually. Courses include UXO Technician I, Demining and AORLE.

Relative Past Performance:
Since 2009, TEEX has provided contracted delivery of the Advanced Ordnance Recognition for Law Enforcement course to the following agencies: Middlesex County Fire & Rescue, Sayreville, New Jersey; Philadelphia, Pennsylvania; City of Jacksonville, Jacksonville, Florida, Baytown Police Department, Baytown, Texas, and the Delaware State Police, Smyrna, Delaware.

Course Description:
Advanced Ordnance Recognition for Law Enforcement (UXO203) - 100.00 Hours:
This course is designed for Hazardous Device School certified Bomb Technicians desiring specialized training in the identification and proper handling of military ordnance. Upon successful completion, participants will be able to detect, identify, recover and/or destroy unexploded ordnance (UXO). The course offers comprehensive, hands-on training through a combination of classroom instruction and hands-on activities needed to help Technicians become more familiar with the handling of military ordnance and aware of all safety standoff distances linked to specific munitions types. Graduates of the meet the requirements to awarded a Unexploded Ordnance Technician I equivalency certificate. Successful course completion earns students 10 Continuing Education Units.

Modules include:
Overview of UXO Environmental Remediation, Mathematics, Electricity, Physics, Explosives and Explosives Effects, Ordnance Safety, Fuze Functioning and Identification, Ordnance Identification and Characteristics (Grenades, Landmines, Sub-munitions, Projectiles and Mortars, Projectile Fuzes, Rockets, Guided Missiles, Bomb Fuzes, Aircraft Bombs, Dispensers, Dispenser Sub-munitions, Pyrotechnics, Chemical Agents and Compounds, Chemical Ordnance, Methods for Disposing of UXO, Metal Detectors, Firing Devices and Other Explosive Devices, Miscellaneous Hazards. Training will include instruction on the following requested topics: underwater ordnance identification/handling and Arming Systems and Operation.

TEXAS A&M ENGINEERING
TEEX
EXTENSION SERVICE

Student Prerequisites:

- Hazardous Device School Certificate and photo identification
- Confirmation of employment with a state, local or federal law enforcement emergency response authority provided on departmental letterhead
- Complete a 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course

Instructor:

The TEEX Explosives Training Program is administered by Ed Fritz, Training Manager responsible for the delivery of traditional UXO Technician training as well as all courses specific to military ordnance identification, removal and mitigation. Mr. Fritz qualifications meet and exceed those outlined in this bid request.

Requested Exceptions:

As a State agency, TEEX may only perform this work if the following requested exceptions are granted by the Lexington-Fayette Urban County Government:

1) Equal Employment Policy: TEEX must follow the Texas A&M University/Texas policy in lieu of Kentucky policy.
2) Indemnification: TEEX indemnification is restricted to that which is allowable by the State of Texas.
3) Insurance: TEEX is self-insured by The Texas A&M University System.

Total Cost:

Training course for 20 students	$38,000.00	Firm, fixed fee
Additional student (up to 5)	$500.00	Price for each additional student

Detailed Cost Breakdown:

Instructional Costs	$24,700.00	Includes: pay, benefits, travel, lodging, meals, incidentals, communications, rental vehicle, mileage, fuel, etc.
Course Materials	$8800.00	Includes: participant manuals, flip books, training aids, certificates, miscellaneous supplies, shipping, etc.
Administrative Costs	$4500.00	Administrative and Logistical Support

TEXAS A&M ENGINEERING
TEEX
EXTENSION SERVICE

Responsibilities:
TEEX is responsible for providing:

- One (1) delivery of the UXO203, Advanced Ordnance Recognition for Law Enforcement course to a maximum of 25 students
- Inert training ordnance for use during training to include shipping costs
- eReaders issued to all participants for use during course delivery
- A participant manual to be displayed on the eReader
- A USB flash drive containing the participant manual for each participant
- All presentation materials required for course delivery (presentations, tests, hand-outs, etc.)
- Certificates for students successfully completing the course
- All travel, lodging, per diem and local transportation for TEEX personnel

Lexington-Fayette Urban County Government is responsible for providing:

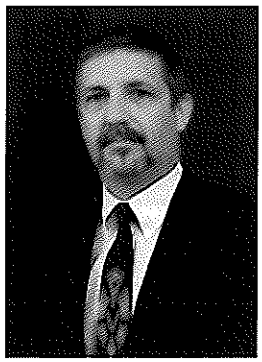
- Appropriate/adequate classroom and field exercise areas to conduct training
- Point of contact for receipt of inert training ordnance shipment
- Secure storage for inert training ordnance and course material
- Access/credentials to training facilities one-day prior to delivery date for set-up
- Audio/visual equipment for classrooms/range areas
- A maximum of 25 participants to attend the training
- Ensure all participants meet prerequisites prior to attendance/participation
- All student expenses (travel, lodging, meals, etc.)
- A Purchase Order submitted to TEEX if bid is awarded
- Payment in full within 30 days of invoice

Point of Contact:
Please contact Ed Brickley at 979-862-1512 or via email at ed.brickley@teex.tamu.edu. TEEX requires a minimum of 30 days advance notice to schedule class dates.

TEXAS A&M ENGINEERING
TEEX
EXTENSION SERVICE

Edward L. Fritz

Training Manager, Public Safety & Security



Professional History

- TEEX Public Safety & Security Division 2006 – Present
- TEEX National Emergency Response & Rescue Training Center 2004 – 2006
- TEEX Emergency Services Training Institute 2002 – 2004
- United States Navy 1982 – 2002

Education

- Naval School Explosive Ordnance Disposal
- Senior EOD Technician
- UXO Technician III
- HAZWOPER Technician

Affiliations

- International Association of Bomb Technicians & Investigators
- National Association of Ordnance Removal Contractors

Mr. Ed Fritz is the Explosives Training Program Manager for the Texas A&M Engineering Extension Service (TEEX), Public Safety & Security Division, a member of The Texas A&M University System. Mr. Fritz is a graduate of the Naval School Explosives Ordnance Disposal in Indian Head, Maryland. Ed has over thirty years of explosives ordnance disposal experience and participates in several explosive ordnance, safety and training professional associations. Mr. Fritz joined TEEX in 2002 and initially served as a Training Specialist for the Emergency Services Training Institute. In 2004, prior to becoming a Training Manager for the Explosives Training Program at Public Safety & Security, Mr. Fritz served as a Training Coordinator for the TEEX National Emergency Response & Rescue Training Center where he helped oversee the TEEX Unexploded Ordnance (UXO) Technician Level I course.

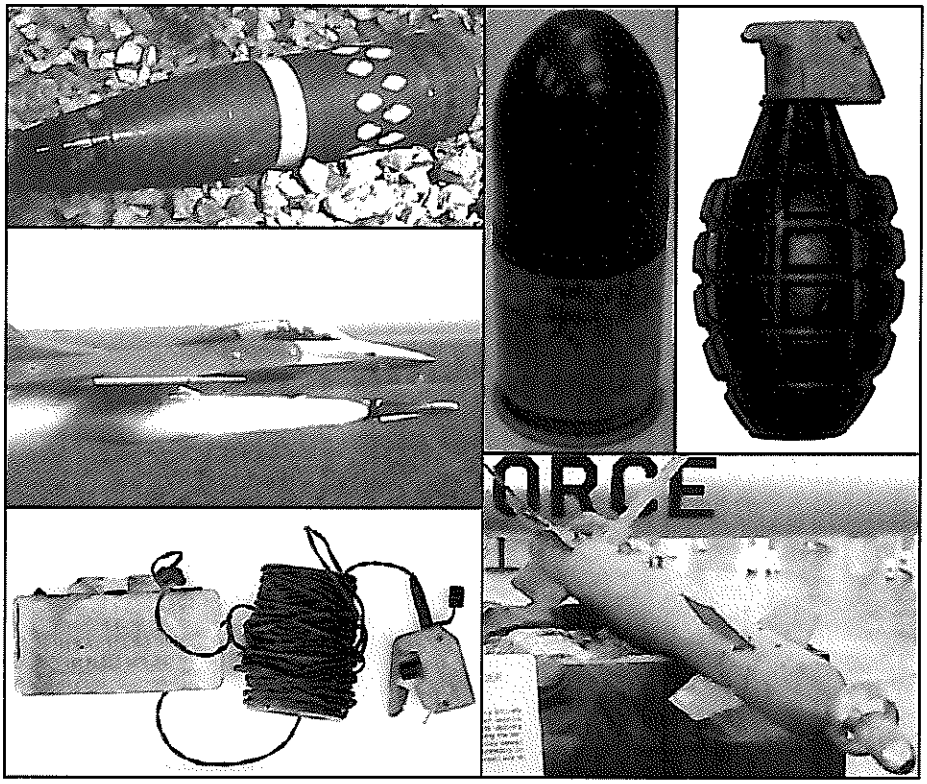
Currently, Mr. Fritz provides oversight for all Explosives Training conducted for the agency and was instrumental in the development of both the Advanced Ordnance Recognition for Law Enforcement and Improvised Explosives Device Awareness currently delivered under his supervision. For his work in the Explosives Training Program area, Ed received the TEEX Distinguished Service Award in 2011; the highest service award available through the agency.

In addition to these courses, Mr. Fritz provides instruction for the Explosive Breacher Entry course and other law enforcement explosives detection and identification courses.

Mr. Fritz retired from the U.S. Navy with twenty years of experience where he served as a Senior Explosive Ordnance Disposal Technician, Master Training Specialist, and Explosive Ordnance Disposal Instructor. While serving his country, Mr. Fritz achieved the following certifications: Naval Diving and Salvage School, Naval Leadership Development, Naval Diving and Training EOD Diver, Explosive Ordnance Disposal Phase I, United Kingdom of Great Britain Defense EOD Technician, Naval Explosive Ordnance Disposal Phase II, and Hazardous Material Diver Technician.

TRAIN • SERVE • RESPOND

Advanced Ordnance Recognition for Law Enforcement



Participant Manual

Texas Engineering Extension Service (TEEX)
Public Safety & Security (PS&S)

A Member of The Texas A&M University System

LS UXO203 (06/12)

TEEX
Public Safety & Security

TEEX offers the latest training techniques and technology to prepare law enforcement officers and private security personnel for the physical and mental challenges of public safety and security.

Students have access to state-of-the-art law enforcement training facilities on the 2,000-acre Texas A&M University Riverside Campus, including a firing range, driving track, and tactical prop houses that provide realistic, hands-on training.

Since 1940, TEEX has been one of the primary trainers for Texas officers and is recognized as the oldest statewide law enforcement extension training agency.

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ADVANCED ORDNANCE RECOGNITION FOR LAW ENFORCEMENT

PARTICIPANT MANUAL

The Texas A&M University System

Texas Engineering Extension Service (TEEX)

Public Safety and Security (PS&S)

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ADVANCED ORDNANCE RECOGNITION FOR LAW ENFORCEMENT

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Module 0

Introduction

Terminal Objective

Upon successful completion of this module, participants will be able to participate in the course.

Enabling Objectives

1. Complete TEEX course registration forms
2. Ask questions related to the course

About This Course

Course Goal

Upon successful completion of this course, participants will be able to detect, identify, recover, and destroy UXO (unexploded ordnance).

Target Audience

This course is designed for Hazardous Device School certified bomb technicians desiring specialized training.

Delivery Methods

Course delivery consists of demonstrations, lectures, participant activities, and task-oriented practical applications. The participant manual is the basic reference document for this course.

Course Prerequisites

Participants must submit the following items at least 21 days prior to the first day of class:

- Hazardous Device School Certification
- Photo identification
- Confirmation of current employment with either a law enforcement agency or other state/local emergency response authority using departmental letterhead

Course Length

100 hours (10 days)

Registration/ Attendance

To receive a certificate of completion, participants must do the following:

- Complete a registration form at the beginning of the course
- Sign the attendance roster for each day of the course
- Complete the evaluation at the end of the course

Course Schedule

Day	Subject	Location
1	Module 0 - Introduction Module 1 - UXO Environmental Remediation Overview Module 2 - Mathematics Module 3 -Electricity Module 4 - Physics	PS&S Classroom

Day	Subject	Location
2	Module 5 - Explosives and Explosive Effects Module 6 - Ordnance Safety Precautions Module 7 - Fuze Functioning	PS&S Classroom
3	Test 1: Progress Test Module 8 - Ordnance Identification Module 9 - Grenades	PS&S Classroom
4	Module 10 - Landmines Module 11 - Firing Devices and Other Explosive Devices Module 12 - Submunitions	PS&S Classroom
5	Module 13 - Projectile Fuzes Module 14 - Projectiles and Mortars	PS&S Classroom
6	Module 15 - Rockets Module 16 - Guided Missiles Module 17 - Bomb Fuzes Module 18 - Aircraft Bombs	PS&S Classroom
7	Module 19 - Dispensers Module 20 - Dispenser Submunitions Module 21 - Pyrotechnics Module 22 - Miscellaneous Hazards Module 23 - Chemical Ordnance	PS&S Classroom
8	Test 2: Ordnance identification and Safety Test Module 24 - Methods for Disposing of UXO Module 25 - Metal Detectors	PS&S Classroom
9	Module 25 - Metal Detectors (Activity) Course Review	Riverside Practical Area
10	Test 3: Comprehensive Test Graduation	PS&S Classroom

Participant Evaluation Strategy

There are three written tests associated with the course.

Test	Type	Topics Covered	Minimum Passing
1	Written	Progress test covering math, electricity, physics, explosives and explosive effects, fuze functioning (Modules 1-7)	80

Test	Type	Topics Covered	Minimum Passing
2	Written	Ordnance identification and Safety (Modules 8-25)	80
3	Written	Comprehensive (All modules)	80

All students must attain at least a minimum passing score for all exams. Failure to attain a minimum passing score will result in removal from training.

Note: Bolded terms in the text can be found in the glossary.

Module

6

Ordnance Safety Precautions

Terminal Objective

Upon successful completion of this module, the participant will be able to describe ordnance safety precautions for munitions.

Enabling Objectives

1. Discuss the basic considerations when encountering UXO
2. Describe the safety precautions applicable to various categories of explosive ordnance

Basic Considerations When Encountering UXO

No procedure for operations involving contact with UXO is 100% safe. The only way to guarantee complete safety is to avoid UXO. Because this is not always possible, adherence to established and applicable UXO safety precautions will help ensure maximum safety.

The preferred and safest method for disposal of UXO is to destroy it in its original position by demolition (Blow in Place [BIP]) whenever circumstances permit. By this method, both the ordnance and the hazard it poses are eliminated in one operation, and no Render Safe Procedure (RSP) by EOD specialists is necessary. Munitions that have been determined to be safe to move can be transported to an approved disposal area.

UXO personnel must observe the following safety precautions at all times and advise others in the vicinity of proper precautions for the protection of everyone in a UXO danger area.

- One person acting alone should never conduct operations involving contact with UXO.
- Assume the following about a UXO until proven otherwise:
  - It is the most hazardous type it could be
  - It has the most hazardous features possible
  - It is in the most hazardous condition it could be in
- UXO must not be moved or disturbed in any way unless doing so has been determined safe. Operations in the vicinity of UXO should be conducted only after a complete plan, including emergency procedures, has been established.
- Limit personnel exposure time in the danger area.
- If UXO has to be moved, it is essential to conduct initial movement remotely.

Safety Precautions for Explosive Ordnance

- Do not activate electronic equipment capable of emitting electromagnetic radiation (radios, cellular phones) in areas known to contain, or suspected of containing, electrically initiated UXO.
- When UXO cannot be disposed of or removed immediately, it should be appropriately marked and the location recorded. Other personnel in the area should be informed that an immediate hazard exists.

- Attempt to positively identify any UXO encountered. Carefully inspect the item for markings and other identifying features, such as size, shape, and external fittings. Do not move the item to inspect it.
- Do not rely on color coding for positive identification of ordnance. Munitions having incomplete, incorrect, or no color coding are not uncommon.
- Note any unusual markings, signs of tampering, or modifications on the ordnance. Such ordnance is considered unknown.
- Avoid inhalation and skin contact with smoke, fumes, and vapors of explosives.
- Avoid contact with hazardous liquids and solids that may result from damaged ordnance.
- Explosive ordnance that has been exposed to fire should be considered extremely hazardous. Physical and chemical changes to the contents may have increased its sensitivity.
- Do not manipulate plungers, vanes, levers, or other external features on ordnance. Such actions may arm or function the device.
- Approach ordnance from the side; avoid the forward and rear ends. The munition may contain an ejection-type payload, shaped-charge warhead, rocket motor, or fuzing system sensitive to external movement.
- Do not allow unnecessary personnel to remain in the vicinity of UXO.

Precautions for Explosive-Loaded Munitions

High Explosives

Do not expose High Explosives (HE) to heat, shock, or friction.

Fragmentation

Establish a safe fragmentation (frag) distance using an approved formula computed based on identification of the munition(s). Until this is done, establish an initial distance of 300 meters or other distance as directed by SOPs. Personnel who must remain within the fragmentation radius of UXO should seek adequate frontal and overhead protection.

Electromagnetic Radiation

Electromagnetic Radiation (EMR) is a form of energy that exhibits wave-like behavior and is emitted by devices such as radios, radar, and cellular phones. Turn all EMR emitters in the area down or off, and do not introduce any new signals to the area.

Static

A static electricity charge can build up on a person's body because of friction. Static is a particular hazard on dry, cold days. Other environmental conditions that contribute to the static hazard are snow storms and high winds. Do not wear static-producing clothing, such as wool or nylon, when handling electrically initiated munitions or demolition materials. To prevent an electric discharge, always ground before touching any part of a munition that contains an electro-explosive device.

Movement

- Do not subject the ordnance to any to movement, which may cause it to detonate.
- Conduct any initial movement of a munition remotely.
- Do not press plungers, turn vanes, rotate spindles, or manipulate levers, setting rings, or any external fittings on the munition or fuze.

Jet

The following precautions are applicable to munitions containing a shaped-charge warhead (HEAT):

- Approach from the side, preferably at 45° from the rear.
- Assume the munition has a piezoelectric fuzing system until proven otherwise.

Ejection

Some ordnance eject components that can injure or kill personnel in the ejection path. Stay clear of the front and rear of the munition.

Precautions for Toxic-Chemical-Loaded Munitions

Toxic chemical agents are considered lethal and include nerve, blister, blood, and choking agents. Riot-control agents are also chemical payloads. The following general safety precautions for this group of munitions are referred to as chemical precautions:

- Do not enter an area suspected of containing toxic chemical agents.
- If a munition suspected of containing a toxic chemical agent is encountered, evacuate the area immediately.
- Establish an exclusion area with a radius of 450 meters and a 2,000-meter downwind hazard area.
- Notify a higher authority.

- If you must enter an area known or suspected of containing riot control agents, have protective equipment available and approach the item from an upwind direction.
- Do not allow riot control agents to contact the skin. Flush with copious amounts of water if this occurs.

Precautions for Pyrotechnic and Incendiary-Loaded Munitions

The following general safety precautions for this group of munitions are referred to collectively as fire precautions:

- Do not inhale the fumes and smoke from burning pyrotechnic or incendiary materials.
- Do not look at burning pyrotechnics. Serious eye injury can result.
- Do not attempt to extinguish burning pyrotechnics or incendiaries.
- Do not remain in the vicinity of a damaged photoflash munition. Photoflash powder will react with moisture to produce hydrogen gas, which may generate sufficient heat to function the munition.

Precautions for Smoke-Loaded Munitions

This group of munitions includes both bursting and screening smokes. Bursting smokes contain White Phosphorus (WP) or Plasticized White Phosphorus (PWP), both of which burn spontaneously when exposed to air. WP munitions also contain a high-explosive burster that functions to break the munition case and expose the contents to air. The general safety precautions for WP munitions are referred to as WP precautions.

Bursting-Smoke Precautions

- Assume WP munitions contain a burster until proven otherwise. Observe HE and frag precautions.
- Never approach a WP munition that is smoking. Burning WP may detonate the burster at any time.
- If a WP munition begins to smoke, evacuate the area around it immediately.
- Do not breathe WP smoke.
- Do not break the crust of WP residue. The compound will re-ignite.
- Wear gloves, eye protection, and flame retardant clothing when entering an area suspected of containing WP.

Screening-Smoke Precautions

Screening smokes contain solid chemical compounds that produce high concentrations of smoke when ignited.

- Be aware of ejection hazards and stay clear of the front and rear of a screening smoke munition.
- Do not breathe the smoke.
- Use respirators when necessary.

Precautions for Fuzing Systems

Fuzing systems contain the explosive elements necessary to function a munition and are the most sensitive element of any munition. If a munition has been fired, always consider the fuze armed and take appropriate precautions. If a fuze cannot be identified, consider it armed.

Cocked Striker

Cocked Striker (C/S) fuzes use a firing pin under spring tension. They are normally used in mechanical fuzes and hand grenades.

- Fuzes containing a C/S should be considered extremely hazardous.
- Do not move or jar a munition containing a C/S.

Wait Time

Wait Time (W/T) is observed to allow batteries and capacitors to lose their charge in electrical fuzes or to ensure a pyrotechnic delay fuze has ceased burning before the item is approached. Unless a munition has been recently fired, dropped, or placed, the standard W/T prescribed by EOD publications is as follows:

- Thirty minutes for unknown powder-train time and grenade fuzes
- One hour for unknown electrical fuzes
- Three hours for unknown guided missiles

Proximity/Variable Time

A Variable Time (VT) fuze is essentially a radar transmitter that senses its height above ground electronically and uses this information to function the munition at the specified time.

- Wait one hour before approaching a recently fired VT fuze.
- Approach at a 45° angle from the rear of the munition.
- Observe EMR precautions.

Piezoelectric

Piezoelectric (often called "Lucky") fuzing systems use a ceramic crystal that produces electric current when stressed to fire an electric base-detonating element. These systems are normally found in HEAT (shaped-charge) warheads. Piezoelectric fuzes can retain their ability to function indefinitely and are considered extremely hazardous.

- Do not stress the piezoelectric crystal element of the munition in any way.
- Observe EMR precautions.

Magnetic

Magnetic fuzing systems sense the movement of ferrous metals and fire when receiving the right magnetic signature.

- Remove all metal from your person if working in an area where magnetically fuzed items are suspected.
- Do not approach a suspected magnetically fuzed item. Notify a higher authority.
- If power lines run through the area, do not turn them down or off.

Acoustic

Acoustic systems are designed to sense noise and fire when a certain noise threshold is reached. Do not approach a suspected acoustically fired item. Notify a higher authority.

Seismic

Seismic systems sense vibration in the ground, air, and water. Do not approach a suspected seismic device. Notify a higher authority.

Booby Trap

The variety and method of functioning of a Booby Trap (B/T) system is limited only by the imagination of the designer. Generally, booby traps are mechanical (tripwires, spring-loaded devices), require very little stimulus to function, and can be attached to almost any munition. Most landmines are designed to be booby trapped using manufactured devices designed for that purpose. Always suspect booby traps when mines are encountered and in areas where infantry and special forces units have trained and operated.

- Check all munitions for signs of tampering or modifications.
- If booby traps are found or suspected, exit the area using the same path that you used to enter.

Precautions for Underwater Ordnance

Influence

Always assume that underwater ordnance contain influence fuzing systems until proven otherwise and take appropriate precautions. For underwater munitions only, the term **influence** usually includes magnetic, acoustic, pressure, and seismic (MAPS). These munitions can include one or two of these influences in any combination. They may also include all of the influence precautions. Observe magnetic, acoustic, and seismic precautions, which were discussed earlier in this module.

Pressure fuzing systems sense the change in ambient hydrostatic pressure. Wave and sea swells induce enough of a pressure difference to fire this type of system. Do not cause any pressure changes in the vicinity of this type of fuzing system.

Contact

Contact munitions rely on direct contact between the ordnance and a target to function. Contact systems use horns, wire or cables, and internal mechanisms, such as switches, to cause functioning of the munition.

Mines

Mines can be free-floating, moored, or bottom types. Moored and free-floating mines generally contain a contact fuzing system, whereas bottom mines are usually the influence type; but there are always exceptions. Chemical horns (the horns that protrude from mines) can remain effective indefinitely.

Do not approach a mine in the surf zone. Pressure differences or contact with the bottom caused by wave action can function the mine.

Torpedoes

Torpedo fuzing systems can be functioned by contact, influence, or both. Observe influence precautions until positive identification is made.

Miscellaneous Underwater Devices

Miscellaneous underwater devices include marine markers, Sound Underwater Signals (SUS), and sonobuoys.

- Stay upwind of burning marine markers. The smoke is toxic.
- Most marine markers and sonobuoys contain saltwater-activated batteries. If dry, do not allow them to come into contact with saltwater.
- Some SUS charges contain a C/S. All contain HE. Do not move or jar an SUS charge until positively identified.

Underwater Drill and Exercise Ordnance

Underwater drill and exercise ordnance can contain hazardous components. Observe all applicable safety precautions for the live ordnance the item resembles until positive identification is made.

Module

8

Ordnance Identification

Terminal Objective

Upon successful completion of this module, the participant will be able to identify ordnance using marking and color codes.

Enabling Objectives

1. Identify types of markings commonly found on ordnance
2. Identify painting and color codes associated with different ordnance types
3. Describe the ordnance categorization system

Ordnance Markings

By regulation, all U.S. munitions are painted, stenciled, and/or stamped with all the information necessary for complete identification (Figure 8.1). Markings may include the standard nomenclature and model number of the complete round, model and type of fuze, and the weapon in which the item is used.

Munitions in which all hazardous materials have been removed and replaced by inert materials are stamped or stenciled INERT.

Munitions in which all hazardous materials have been removed and not replaced are stamped or stenciled EMPTY.

> **Caution!** Never rely on color or markings alone to make a positive identification of a UXO.
>
> **Caution!** Items containing live explosive and stamped INERT or EMPTY have been found in the past.

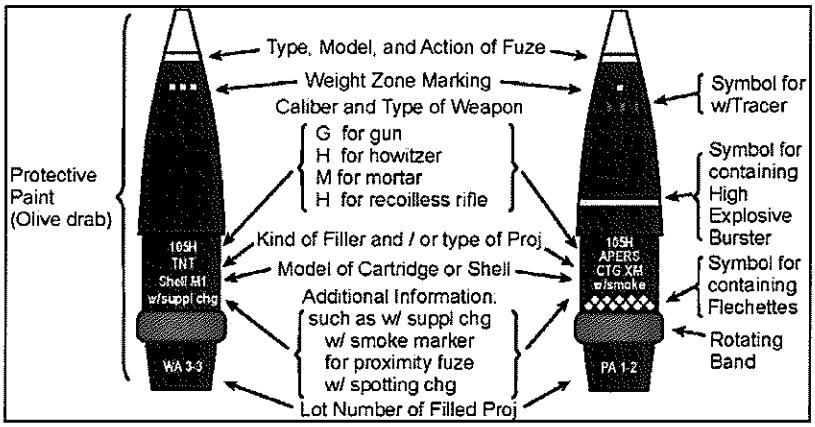

Figure 8.1: Ammunition markings

Ordnance Painting and Color Codes

Ammunition is painted to prevent corrosion and as a means of identification (Table 8.1 and Table 8.2). A system of color codes is used to indicate the primary use of the item (group) and the type of filler it contains. Some items are anodized a specific color rather than painted.

When possible, the color indicating primary use is applied to the entire exterior surface of the munition as its background color. If this is not possible, a colored band or colored disks or squares may indicate primary use. The munition nomenclature may also be color coded to aid in identification.

Table 8.1: Ordnance Color Codes

Color	Interpretation
Yellow	• Identifies high explosives • Indicates the presence of explosives either: – Sufficient to cause the ammunition to function as a high explosives – Particularly hazardous to the user
Brown	• Identifies rocket motors as well as low explosives and propellants • Indicates the presence of explosives either: – Sufficient to cause the ammunition to function as low explosive or – Particularly hazardous to the user
Gray	Indicates ammunition that contains irritant or toxic agents when used as an overall body color except for underwater ordnance
Gray with red band(s)	Indicates the ammunition contains an irritant (harassing) agent.
Gray with dark green band(s)	Indicates the ammunition contains a toxic agent
Black	Identifies armor-defeating ammunition except on underwater ordnance
Silver/ Aluminum	Identifies countermeasures ammunition
Light Green	Identifies smoke or marker ammunition
Red	Identifies incendiary ammunition or indicates the presence of highly flammable material
White	Identifies illuminating ammunition or ammunition producing a colored light; exceptions are underwater ordnance, guided missiles, and rocket motors
Blue	Identifies ammunition used for training or firing practice

Table 8.1: Ordnance Color Codes (Continued)

Color	Interpretation
Orange	Identifies ammunition used for tracking or recovery
Gold	Identifies dummy/drill/inert ammunition used for handling and loading practice
Nonsignificant Colors	
Olive Drab	All ammunition items
Black	For lettering
White	• For lettering • For guided missiles and rocket motors

Table 8.2: Primary Uses of Color

Primary Use	Color
High explosive	
Low explosive	
Chemical	(gray)
Smoke	
Incendiary	
Illuminating/pyrotechnic	(white)
Armor defeating	
Countermeasure	(silver)
Noncombat (practice)	
Noncombat (training)	(gold)

Color coding has evolved over time and is now currently in its third generation for U.S. munitions. Ammunition manufactured prior to 1962 was generally painted as shown for the first generation. Second-generation color coding was applied between 1962 and 1976.

Very old items may or may not have standardized color codes. Regardless, never rely on color codes alone for positive identification. Attempt to verify initial identification with nomenclature stamped into the munition body.

The color codes shown in Figures 8.2-8.10 apply to all ammunition except small arms, blanks, cartridge cases, fuzes, some pyrotechnic devices, and demolition items and components that do not need color coding for identification.

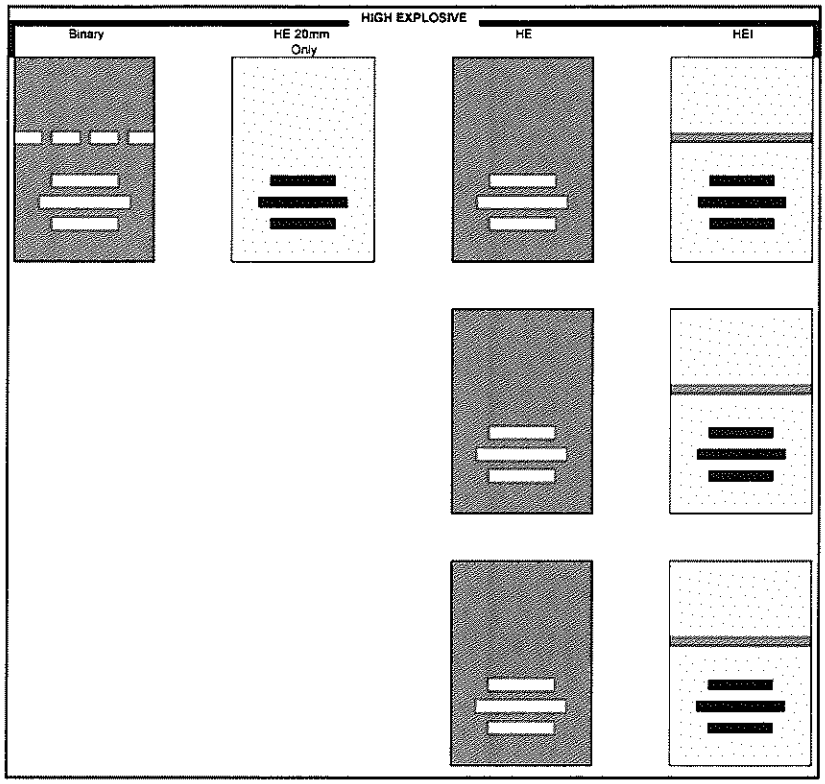

Figure 8.2: High explosive ordnance identification color chart

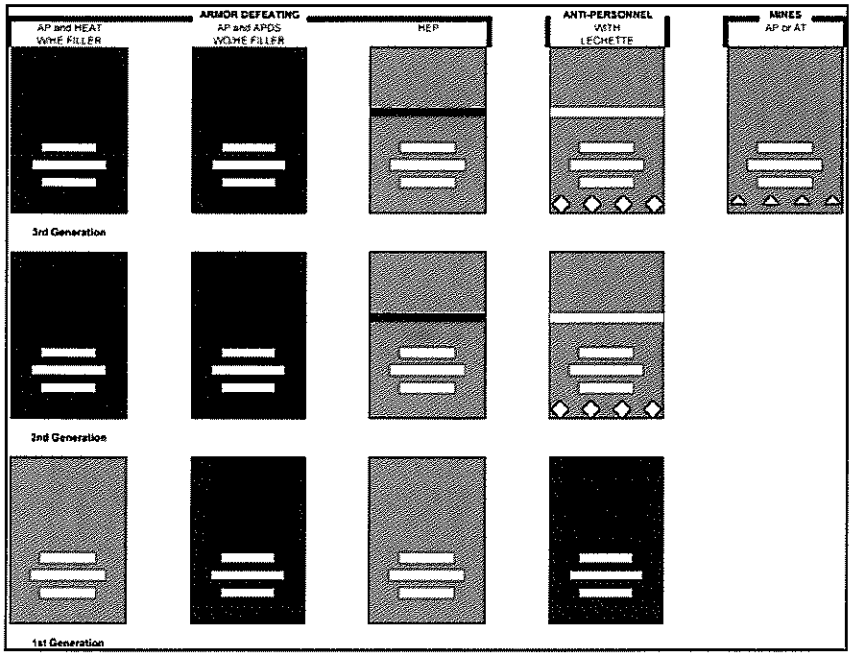

Figure 8.3: Armor defeating, anti-personnel, and mine ordnance identification color chart

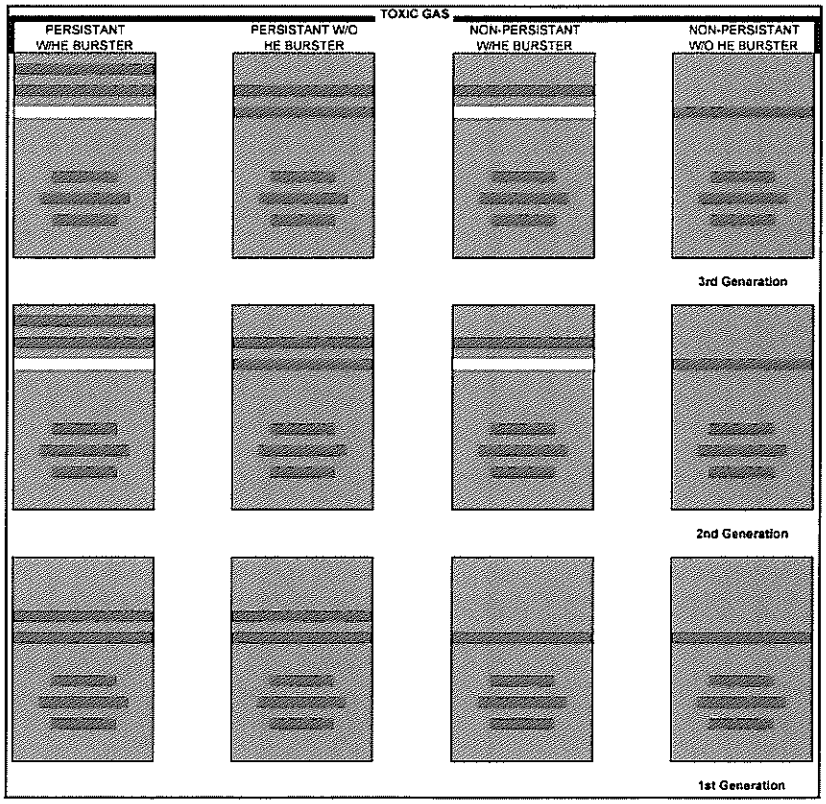

Figure 8.4: Toxic gas ordnance identification color chart

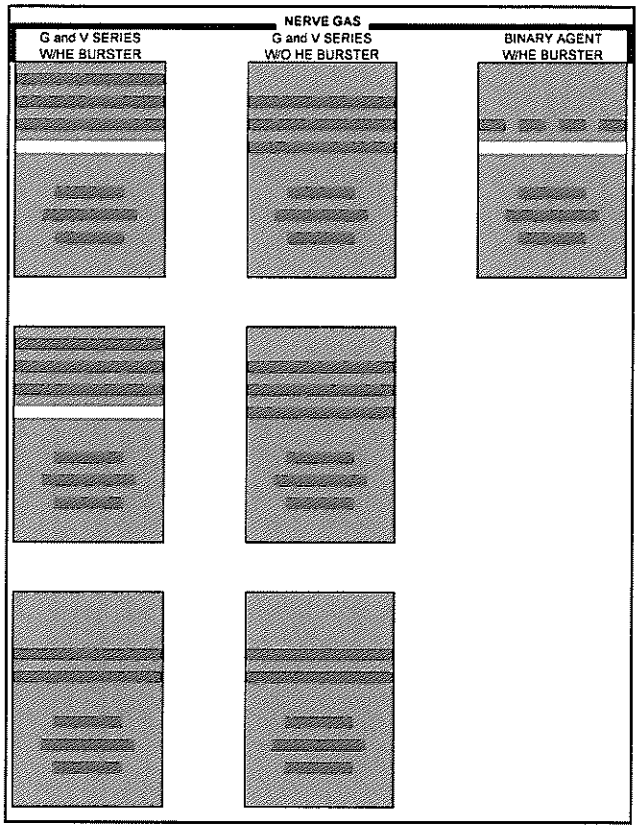

Figure 8.5: Nerve gas ordnance identification color chart

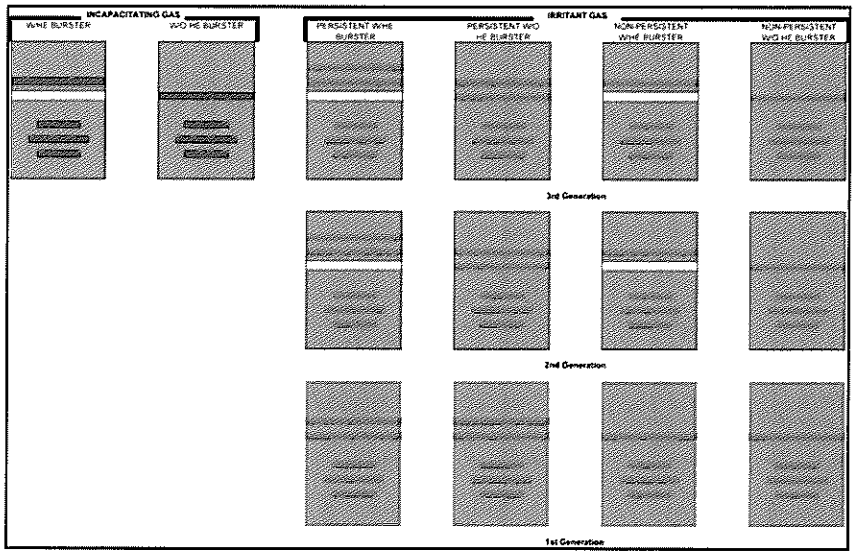

Figure 8.6: Incapacitating gas and irritant gas ordnance identification color chart

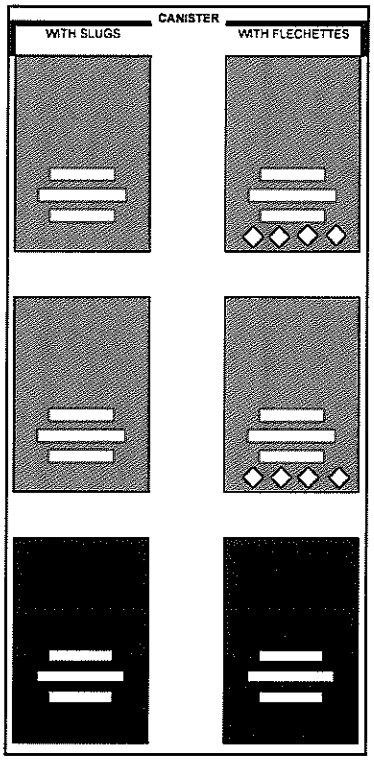

Figure 8.7: Canister ordnance identification color chart

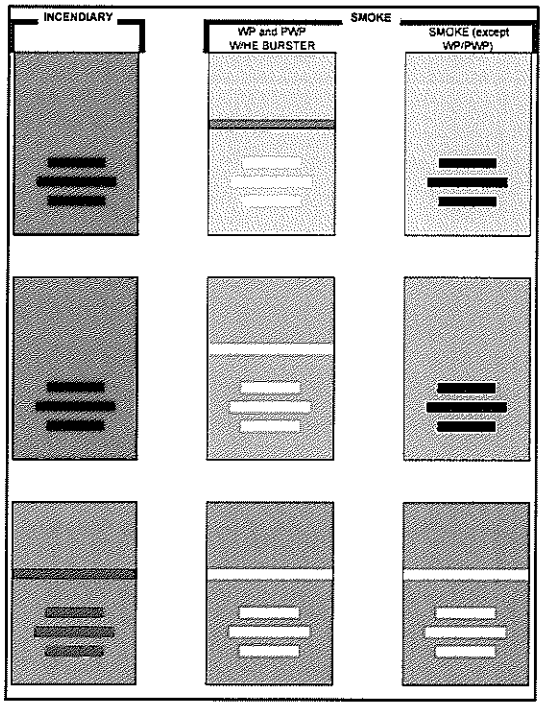

Figure 8.8: Incendiary and smoke ordnance identification color chart

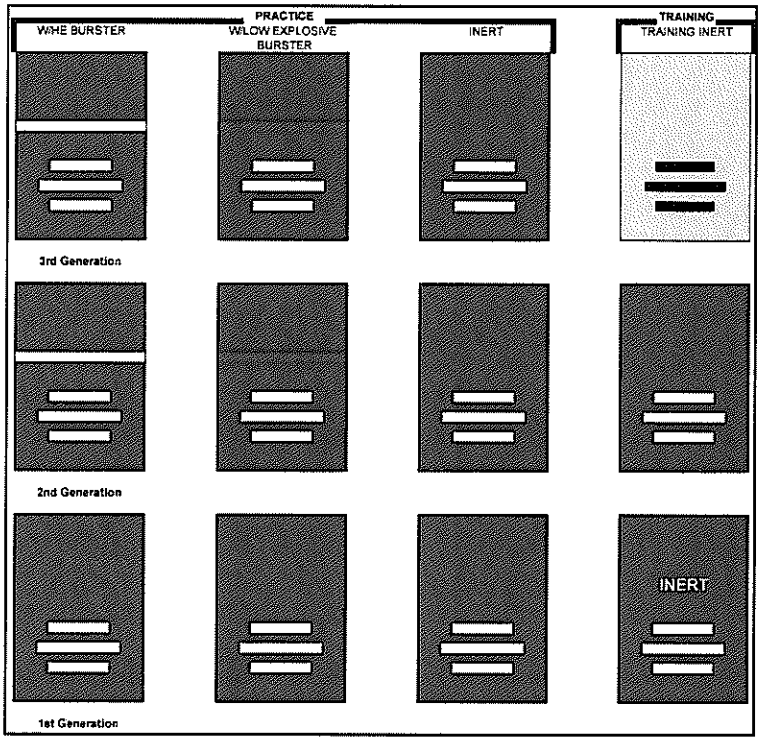

Figure 8.9: Practice and training ordnance identification color chart

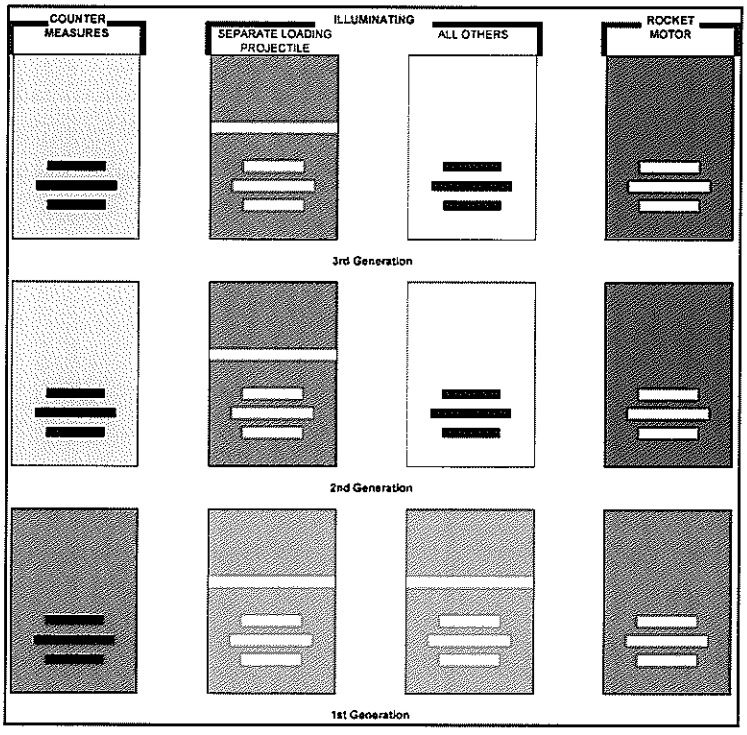

Figure 8.10: Counter measures, illuminating, and rocket motor ordnance identification color chart

Categorization of Ordnance

As with all other categories of munitions we will discuss, virtually every developed country produces ordnance. There may be literally hundreds of different models within each munitions group and exceptions to every rule. For example, there are more than 700 grenade models available for use worldwide, not including homemade variations of manufactured models.

Regardless of country of manufacture, basic construction features based on category and group are generally similar. We will discuss selected items with identification and functioning features representative of a particular category and group and concentrate on U.S. munitions, as that is what you are most likely to encounter. Examples of foreign ordnance may be used as applicable for illustration purposes. No classified information is discussed.

The **category** is a fundamental and distinct class to which an ordnance item belongs. Category is usually determined by means of deployment or intended use. For example, bombs are normally delivered by aircraft; whereas projectiles are fired by artillery.

The **group** an ordnance item belongs to is a subclass of its category, and is determined by intended effect. For example, a major category of munitions is projectiles. Major groups of projectiles include High Explosive (HE), High Explosive Anti-Tank (HEAT), Armor Piercing (AP), and many others.

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- Emergency management
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- Instructional design

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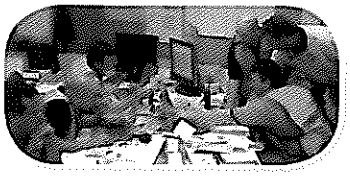
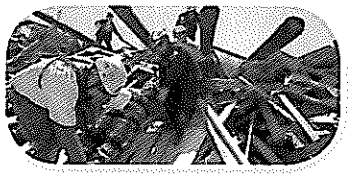
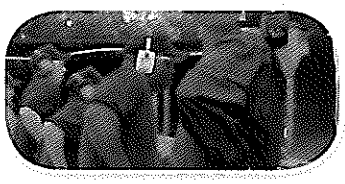


HOMELAND SECURITY

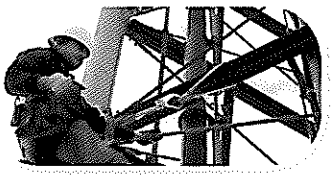


DISASTER PREPAREDNESS & RESPONSE



PUBLIC SAFETY & SECURITY

PUBLIC WORKS & INFRASTRUCTURE



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