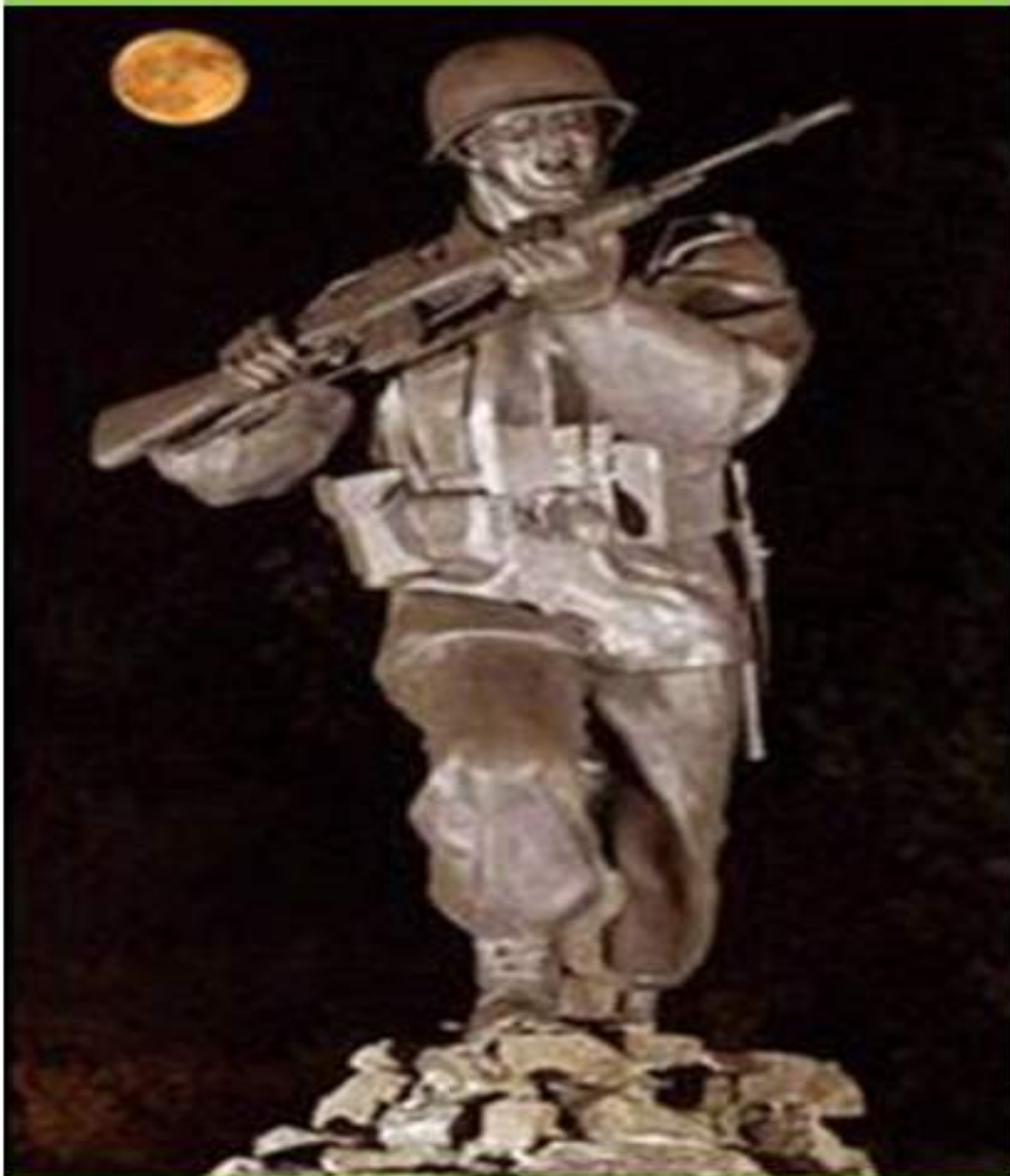


**USASA  
FORT DIX PAM 350-3**



**RANGE GUIDE 350-3**



DEPARTMENT OF THE ARMY  
UNITED STATES ARMY SUPPORT ACTIVITY FORT DIX  
Joint Base McGuire-Dix-Lakehurst, New Jersey 08640-5089  
1 January 2023

USASA Fort Dix Pamphlet 350-3

**Training**  
**USASA FORT DIX RANGE / TRAINING AREA**  
**OPERATING PROCEDURES AND USAGE GUIDE**

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**(AMIM-DIO-T)**

**Applicability:** This pamphlet applies to all individuals, units, and agencies that train at Army Support Activity Fort Dix (USASAFD), to include Active Duty, National Guard, and Reserve Component units; Federal and State agencies; and licensed Civilian and Non-DoD Organizations.



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TD/DPTMS (500)  
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## **Contents** (Listed by paragraph and pg. number)

### **Chapter 1**

#### **General**

- 1-1. Purpose
- 1-2. Applicability pg. 1
- 1-3. General pg. 1
- 1-4. Administrative and/or Punitive Consequences of Non-Compliance pg. 1

### **Chapter 2**

#### **Coordination**

- 2-1. Directorate of Plans, Training, Mobilization and Security (DPTMS) pg. 1
- 2-2. Training Division (TD) pg. 2
- 2-3. Range Operations pg. 2
- 2-4. Ammunition Supply Point (ASP) pg. 2
- 2-5. 87th Civil Engineering Squadron (87 CE) pg. 3
- 2-6. 87th Security Forces Squadron (87 SFS) pg. 3
- 2-7. Network Enterprise Corporation (NEC) pg. 3
- 2-8. Explosive Ordnance Disposal (EOD) pg. 3
- 2-9. Emergency Medical Support pg. 3
- 2-10. Training Units pg. 4

### **Chapter 3**

#### **Administration**

- 3-1. Range Control Facilities and Hours pg. 4
- 3-2. Range Supplies, Targets and Equipment pg. 4
- 3-3. Security and Safeguarding Ranges and Equipment pg. 5
- 3-4. Facility Utilization pg. 6
- 3-5. Privately Owned Vehicle (POV) Usage pg. 6
- 3-6. Water pg. 6
- 3-7. Medical Support pg. 7

### **Chapter 4**

#### **Range Complex Communications**

- 4-1. General pg. 8
- 4-2. Radio Procedures pg. 9
- 4-3. Installed Phone System pg. 9
- 4-4. Unit Internal Frequencies pg. 9
- 4-5. Emergency Communication pg. 9

### **Chapter 5**

#### **Range and Training Area Operation Procedures**

- 5-1. General pg. 9
- 5-2. Officer-in-Charge (OIC) and Range Safety Officer (RSO) Certification pg. 10
- 5-3. Range Decertification and Recertification Procedures pg. 11



5-4. Access to Ranges, Training Areas and Impact Areas	pg. 11
5-5. Training Hours	pg. 12
5-6. Actions before Training/Firing	pg. 12
5-7. Occupation Time Procedures	pg. 12
5-8. First Round Procedures	pg. 13
5-9. Actions during Training/Firing	pg. 13
5-10. Dry Time Procedures	pg. 14
5-11. Actions after Training/Firing	pg. 14
5-12. Clearance/Departure Procedures	pg. 14
5-13. Publications/Paperwork	pg. 15
5-14. Roads, Gates and Barriers	pg. 15
5-15. Downrange and Impact Area Control	pg. 16
5-16. Off Limits Areas	pg. 16
5-17. Training Accidents and Incidents	pg. 16
5-18. Uniform Standards	pg. 17
5-19. Personal Weapons	pg. 17
5-20. Armor Defeating Weapon Systems	pg. 17
5-21. Airspace Safety Restrictions	pg. 17
5-22. Disposition of UXO's and Misfires	pg. 18
5-23. Demolition Exercises	pg. 18
5-24. Chemical Agent CS/Smoke and Smoke Operations/Pyrotechnics	pg. 19
5-25. Water and Water Crossing Operations	pg. 20
5-26. Foot Marches and Convoy Operations	pg. 21
5-27. Bulk Fuel Operations	pg. 21

## **Appendixes**

A. References	pg. 22
B. Range Standards (Checklists)	pg. 25
C. Range Usage and Planning Requirements	pg. 31
D. Range / Facility Matrix	pg. 33
E. Ranges, Training Areas, and Facilities	pg. 43
F. Indirect Fire Weapons Systems	pg. 212
G. Aircraft Operations	pg. 229
H. Environmental Protection and Conservation	pg. 239
I. Contingency Operating Location (COL) Victory	pg. 249
J. Training Areas Contained in US Naval Air Engineering Center, Lakehurst NJ	pg. 254
K. Operational Risk Management (ORM)	pg. 255
L. Training Accidents / Incidents	pg. 262
M. Ammunition	pg. 267
N. Safety and Weather Precautions	pg. 273
O. Vehicle Operations	pg. 284
P. Range Sanitation Procedures	pg. 288
Q. Laser Operations	pg. 290
R. Required Documentation by Training Event	pg. 295
S. Locator Map	pg. 323
T. Range Complex Telephone Directory	pg. 325

## Glossary

### Table List

B - 1. Range OIC / RSO Requirements	pg. 25
B - 2. Range Personnel and Duties	pg. 26
B - 3. Range Operations Checklist	pg. 27
B - 4. Rifle Range Safety Briefing	pg. 29
D - 1. Facility / Range / Site Information	pg. 33
D - 2. Range / Facility Information by Caliber	pg. 40
E - 1. Bivouac Sites	pg. 44
E - 2. Contingency Operating Location (COL) Liberty	pg. 48
E - 3. Contingency Operating Location (COL) Victory	pg. 49
E - 4. Drivers Training Area 2 (DTA-2)	pg. 50
E - 5. Drivers Training Area 3 (DTA-3)	pg. 51
E - 6. Drivers Training Area 4 (DTA-4)	pg. 52
E - 7. Drivers Training Area 5 (DTA-5)	pg. 53
E - 8. Engineer Heavy Equipment Training Site	pg. 54
E - 9. Explosive Ordnance Disposal Range (EOD) Verdun Range	pg. 55
E - 10. HF-11 - Gas Chamber (CS) - Flanders Lorraine	pg. 56
E - 11. Home Station Training Lane (HSTL - East)	pg. 61
E - 12. Home Station Training Lane (HSTL - West)	pg. 62
E - 13. Internment Resettlement (IR Site) TAC 3C	pg. 63
E - 14. Internment Resettlement (IR Site) TAC 12C	pg. 64
E - 15. Land Navigation Course 2 - (LAND NAV 2)	pg. 65
E - 16. Land Navigation Course 3 - (LAND NAV 3)	pg. 65
E - 17. Land Navigation Course 4 - (LAND NAV 4)	pg. 66
E - 18. Leadership Reaction Course (LRC)	pg. 66
E - 19. Litter Obstacle Course (LOC)	pg. 67
E - 20. Obstacle Course	pg. 58
E - 21. Range 1 – Heavy Demolition	pg. 69
E - 22. Range 3A – Hand Grenade Qualification Course (Non-Firing) (HGQC)	pg. 71
E - 23. Range 3B - Hand Grenade Familiarization Range (Live) HGFR)	pg. 73
E - 24. Range 4 - Live Fire Exercise Shoot House (LFXSH) (SRTA, UTM, and Simunition only)	pg. 75
E - 25. Range 6A – Combat Pistol Qualification Course (CPQC)	pg. 78
E - 26. Range 6B - Combat Pistol Qualification Course (CPQC)	pg. 80
E - 27. Range 7 – Multipurpose Training Range (MPTR)	pg. 82
E - 28. Range 8 – Multipurpose Training Range (MPTR)	pg. 84
E - 29. Range 9 – Grenade Launcher Range (GLR) (TPT only)	pg. 86
E - 30. Range 10 – Basic 10M Firing Range (Zero)	pg. 88
E - 31. Range 11 – Automated Multipurpose Machine Gun Range (MPMG)	pg. 90
E - 32. Range 12 – Non-standard Urban Operations Training Site (Small)	pg. 92
E - 33. Range 13 – Multipurpose Training Range (MPTR)	pg. 94
E - 34. Range 14 - Morale Welfare and Recreation (MWR) Range	pg. 95
E - 35. Range 15 – Known Distance Range (KD)	pg. 97

E - 36. Range 16 – Automated Multipurpose Training Range (MPTR)	pg. 99
E - 37. Range 17 – Multipurpose Training Range (MPTR)	pg. 101
E - 38. Range 18A – Basic 10M-25M Firing Range (Zero)	pg. 102
E - 39. Range 18B – Basic 10M-25M Firing Range (Zero)	pg. 104
E - 40. Range 19 – Basic 10M-25M Firing Range (Zero)	pg. 106
E - 41. Range 20 – Basic 10M-25M Firing Range (Zero)	pg. 108
E - 42. Range 21 – Automated Record Fire Range (ARF)	pg. 110
E - 43. Range 22 – Basic 10M-25M Firing Range (Zero)	pg. 112
E - 44. Range 23 – Basic 10M-25M Firing Range (Zero)	pg. 114
E - 45. Range 24 - Basic 10M-25M Firing Range (Zero)	pg. 116
E - 46. Range 25 - Basic 10M-25M Firing Range (Zero)	pg. 118
E - 47. Range 26 - Basic 10M-25M Firing Range (Zero)	pg. 120
E - 48. Range 27A - Basic 10M-25M Firing Range (Zero)	pg. 122
E - 49. Range 27B - Basic 10M-25M Firing Range (Zero)	pg. 124
E - 50. Range 27C - Basic 10M-25M Firing Range (Zero)	pg. 126
E - 51. Range 28A – Combat Pistol Qualification Course (CPQC)	pg. 128
E - 52. Range 28B – Basic 10M-25M Firing Range (Zero)	pg. 130
E - 53. Range 29A – Basic 10M-25M Firing Range (Zero)	pg. 132
E - 54. Range 29B - Basic 10M-25M Firing Range (Zero)	pg. 134
E - 55. Range 30A – Multipurpose Training Range (MPTR)	pg. 136
E - 56. Range 30B – Fire and Movement Range (FMR)	pg. 138
E - 57. Range 31 - Basic 10M-25M Firing Range (Zero)	pg. 140
E - 58. Range 32 – Automated Multipurpose Training Range (MPTR)	pg. 142
E - 59. Range 33 - Basic 10M-25M Firing Range (Zero)	pg. 144
E - 60. Range 34 – Automated Record Fire Range (ARF)	pg. 146
E - 61. Range 35 - Automated Record Fire Range (ARF)	pg. 148
E - 62. Range 37 - Basic 10M-25M Firing Range (Zero)	pg. 150
E - 63. Range 38 - Automated Record Fire Range (ARF)	pg. 152
E - 64. Range 39A - Basic 10M-25M Firing Range (Zero)	pg. 154
E - 65. Range 39B – Mortar Firing Point 4 (MFP)	pg. 156
E - 66. Range 40 – Automated Multipurpose Machine Gun Range (MPMG)	pg. 158
E - 67. Range 47A – Multipurpose Sniper Range (MPSR)	pg. 161
E - 68. Range 47B- Multipurpose Training Range (MPTR)	pg. 163
E - 69. Range 53 – Light Demolition Range (DEMO L)	pg. 165
E - 70. Range 55 – Light Demolition Range (DEMO L)	pg. 167
E - 71. Range 59A - Live Fire Exercise Shoot House (LFXSH) (5.56mm, 5.56mm EPR, Shotgun)	pg. 169
E - 72. Range 59B - Classroom	pg. 173
E - 73. Range 59C – Multipurpose Training Range (MPTR)	pg. 175
E - 74. Range 59D - Basic 10M-25M Firing Range (Zero)	pg. 178
E - 75. Range 59E – Collective Training Facility (CTF)	pg. 180
E - 76. Range 59F - Urban Assault Course (UAC)	pg. 182
E - 77. Range 61 – Automated Infantry Squad Battle Course (ISBC)	pg. 184
E - 78. Range 63 - Basic 10M-25M Firing Range (Zero)	pg. 188
E - 79. Range 65 – Automated Multipurpose Training Range (MPTR)	pg. 190
E - 80. Range 71 – Mortar Firing Point 7 (MFP)	pg. 192

E - 81. Range 75 – Mortar Firing Point 10 (MFP)	pg. 194
E - 82. Range 85 – Scout/Recce Gunnery Complex (SRGC)	pg. 196
E - 83. Range 86 – Non-standard Urban Operations Training Site (Medium)	pg. 198
E - 84. Rappel Tower	pg. 200
E - 85. Tactical (TAC) Training Area	pg. 201
E - 86. Vehicle Wash Rack (Large)	pg. 209
E - 87. Vehicle Wash Rack (Small)	pg. 211
F - 1. Artillery Firing Point Locations	pg. 216
F - 2. Mortar Firing Point Locations	pg. 216
F - 3. Impact Area Boundaries	pg. 216
F - 4. Target List	pg. 216
F - 5. Declination Station Data	pg. 217
F - 6. Indirect Fire OIC/RSO Checklist and Certification	pg. 221
F - 7. Artillery Safety Card/Fan	pg. 223
F - 8. Mortar Safety Card/Fan	pg. 225
F - 9. SDZ Data	pg. 227
F - 10. GPS Firing Point Information	pg. 228
G - 1. Aviation Communication Card	pg. 234
G - 2. Range Facility Landing Sites	pg. 235
G - 3. Sample ASA Fort Dix UAS Request	pg. 236
H - 1. Natural Resource Management	pg. 238
H - 2. Hazardous Substance Management and Containment	pg. 239
H - 3. Fire Prevention	pg. 241
N - 1. Wildlife / Insects	pg. 273
N - 2. Heat Casualty Prevention	pg. 274
N - 3. Cold Weather Injury Prevention	pg. 277
N - 4. Preventive Actions for Adverse Weather Conditions	pg. 278
N - 5. Snowstorm Precautions	pg. 280
N - 6. Field Heaters and Carbon Monoxide Exposure	pg. 281
Q - 1. MILES Safety Distances	pg. 292
Q - 2. Example Laser Safety Briefing	pg. 292
T - 1. Range Phone Directory	pg. 324

## Figure List

E - 1. Contingency Operating Location (COL) Liberty	pg. 48
E - 2. Contingency Operating Location (COL) Victory	pg. 49
E - 3. Drivers Training Area 2 (DTA-2)	pg. 50
E - 4. Drivers Training Area 3 (DTA-3)	pg. 51
E - 5. Drivers Training Area 4 (DTA-4)	pg. 52
E - 6. Drivers Training Area 5 (DTA-5)	pg. 53
E - 7. Engineer Heavy Equipment Training Site	pg. 54
E - 8. Explosive Ordnance Disposal Range (EOD) Verdun	pg. 55
E - 9. HF-11 - Gas Chamber (CS) - Flanders Lorraine (WW I)	pg. 57
E - 10. USASAFD Form 2258-R (CS Chamber Qualification Statement)	pg. 58
E - 11. USASAFD Form 2259-R (CS Chamber Safety Checklist)	pg. 59
E - 12. Home Station Training Lane (HSTL - East)	pg. 61

E - 13. Home Station Training Lane (HSTL - West)	pg. 62
E - 14. Internment Resettlement (IR SITE) TAC 3C	pg. 63
E - 15. Internment Resettlement (IR SITE) TAC 12C	pg. 64
E - 16. Litter Obstacle Course	pg. 67
E - 17. Range 1 – Heavy Demolition Range	pg. 70
E - 18. Range 3A – Hand Grenade Qualification Course (Non-Firing) (HGQC)	pg. 72
E - 19. Range 3B – Hand Grenade Familiarization Range (Live) (HGFR)	pg. 74
E - 20. Range 4 – Live Fire Exercise Shoot House (LFXSH) (SRTA, UTM, and Simunitions only) Exterior	pg. 77
E - 21. Range 4 – Live Fire Exercise Shoot House (LFXSH) (SRTA, UTM, and Simunitions only) Interior	pg. 77
E - 22. Range 6A – Combat Pistol Qualification Course (CPQC)	pg. 79
E - 23. Range 6B - Combat Pistol Qualification Course (CPQC)	pg. 81
E - 24. Range 7 – Multipurpose Training Range (MPTR)	pg. 83
E - 25. Range 8 – Multipurpose Training Range (MPTR)	pg. 85
E - 26. Range 9 – Grenade Launcher Range (GLR) (TPT only)	pg. 87
E - 27. Range 10 – Basic 10M Firing Range (Zero)	pg. 89
E - 28. Range 11 – Automated Multipurpose Machine Gun Range (MPMG)	pg. 91
E - 29. Range 12 – Non-standard Urban Operations Training Site (Small)	pg. 93
E - 30. Range 14 - Morale Welfare and Recreation (MWR) Range	pg. 96
E - 31. Range 15 – Known Distance Range (KD)	pg. 98
E - 32. Range 16 – Automated Multipurpose Training Range (MPTR)	pg. 100
E - 33. Range 18A – Basic 10M-25M Firing Range (Zero)	pg. 103
E - 34. Range 18B – Basic 10M-25M Firing Range (Zero)	pg. 105
E - 35. Range 19 – Basic 10M-25M Firing Range (Zero)	pg. 107
E - 36. Range 20 – Basic 10M-25M Firing Range (Zero)	pg. 109
E - 37. Range 21 – Automated Record Fire Range (ARF)	pg. 111
E - 38. Range 22 – Basic 10M-25M Firing Range (Zero)	pg. 113
E - 39. Range 23 – Basic 10M-25M Firing Range (Zero)	pg. 115
E - 40. Range 24 - Basic 10M-25M Firing Range (Zero)	pg. 117
E - 41. Range 25 - Basic 10M-25M Firing Range (Zero)	pg. 119
E - 42. Range 26 - Basic 10M-25M Firing Range (Zero)	pg. 121
E - 43. Range 27A - Basic 10M-25M Firing Range (Zero)	pg. 123
E - 44. Range 27B - Basic 10M-25M Firing Range (Zero)	pg. 125
E - 45. Range 27C - Basic 10M-25M Firing Range (Zero)	pg. 127
E - 46. Range 28A – Combat Pistol Qualification Course (CPQC)	pg. 129
E - 47. Range 28B - Basic 10M-25M Firing Range (Zero)	pg. 131
E - 48. Range 29A - Basic 10M-25M Firing Range (Zero)	pg. 133
E - 49. Range 29B - Basic 10M-25M Firing Range (Zero)	pg. 135
E - 50. Range 30A – Multipurpose Training Range (MPTR)	pg. 137
E - 51. Range 30B – Fire and Movement Range (FMR)	pg. 139
E - 52. Range 31 - Basic 10M-25M Firing Range (Zero)	pg. 141
E - 53. Range 32 – Automated Multipurpose Training Range (MPTR)	pg. 143
E - 54. Range 33 - Basic 10M-25M Firing Range (Zero)	pg. 145
E - 55. Range 34 – Automated Record Fire Range (ARF)	pg. 147
E - 56. Range 35 - Automated Record Fire Range (ARF)	pg. 149

E - 57. Range 37 - Basic 10M-25M Firing Range (Zero)	pg. 151
E - 58. Range 38 - Automated Record Fire Range (ARF)	pg. 153
E - 59. Range 39A – Basic 10M-25M Firing Range (Zero)	pg. 155
E - 60. Range 39B – Mortar Firing Point 4 (MFP)	pg. 157
E - 61. Range 40 – Automated Multipurpose Machine Gun Range (MPMG)	pg. 160
E - 62. Range 47A – Multipurpose Sniper Range (MPSR)	pg. 162
E - 63. Range 47B – Multipurpose Training Range (MPTR)	pg. 164
E - 64. Range 53 – Light Demolition Range (DEMO L)	pg. 166
E - 65. Range 55 – Light Demolition Range (DEMO L)	pg. 168
E - 66. Range 59A – Live Fire Exercise Shoot House (LFXSH) (5.56mm, 5.56mm EPR, Shotgun)	pg. 172
E - 67. Range 59A - Live Fire Exercise Shoot House (LFXSH) (5.56mm, 5.56mm EPR, Shotgun) (Interior)	pg. 172
E - 68. Range 59B - Classroom	pg. 174
E - 69. Range 59C – Multipurpose Training Range (MPTR)	pg. 177
E - 70. Range 59D - Basic 10M-25M Firing Range (Zero)	pg. 179
E - 71. Range 59E – Collective Training Facility (CTF)	pg. 181
E - 72. Range 59F - Urban Assault Course (UAC)	pg. 183
E - 73. Range 61 – Automated Infantry Squad Battle Course (ISBC)	pg. 186
E - 74. Range 61 – Automated Infantry Squad Battle Course (ISBC) (Target Reference Point)	pg. 187
E - 75. Range 63 - Basic 10M-25M Firing Range (Zero)	pg. 189
E - 76. Range 65 – Automated Multipurpose Training Range (MPTR)	pg. 191
E – 77. Range 71 – Mortar Firing Point 7 (MFP)	pg. 193
E - 78. Range 75 – Mortar Firing Point 10 (MFP)	pg. 195
E - 79. Range 85 – Scout/Recce Gunnery Complex (SRGC)	pg. 197
E - 80. Range 86 – Non-standard Urban Operations Training Site (Medium)	pg. 199
E - 81. Tactical Area Functional and Facility Description	pg. 201
E - 82. Lakehurst TAC Areas with Off Limits Area	pg. 208
E - 83. Vehicle Wash Rack (Large)	pg. 210
G - 1. Restricted Air Space R5001 A/B	pg. 232
G - 2. Restricted Space Air Corridors	pg. 233
I - 1. Contingency Operating Location (COL) Victory Map	pg. 250
I - 2. Contingency Operating Location (COL) In Processing Checklist	pg. 251
I - 3. Contingency Operating Location (COL) Out Processing Checklist	pg. 252
K - 1. Risk Assessment Matrix	pg. 255
K - 2. Risk Value	pg. 255
K - 3. Deliberate Risk Assessment Worksheet	pg. 258
L - 1. USASAFD Accident / Incident Report	pg. 265
M - 1. Hazardous Material Drivers Credentialing	pg. 267
N - 1. Heat Phase Guidelines	pg. 276
R - 1. USASAFD Form 2226-R Inspection Checklist for Ranges	pg. 295
R - 2. USASAFD Form 2227-R Automated Range Opening/Clearing Checklist	pg. 296
R - 3. USASAFD Form 2228-R Inspection Checklist for TAC Areas	pg. 298
R - 4. USASAFD Form 2229-R Inspection Checklist for Shoot House 59A	pg. 299
R - 5. USASAFD Form 2230-R Inspection Checklist for Range 59E (CTF)	pg. 300

R - 6. USASAFD Form 2251-R Rappel Master Certification Statement	pg. 302
R - 7. USASAFD Form 2252-R Rappel Tower Safety Checklist	pg. 303
R - 8. USASAFD Form 2258-R CS Chamber Qualification Statement	pg. 307
R - 9. USASAFD Form 2259-R CS Chamber Safety Checklist	pg. 308
R - 10. USASAFD Form 2260-R Gunnery Shot Sheet (Ranges 65/85)	pg. 310
R - 11. USASAFD Form 2270-R Ruck March Request	pg. 315
R - 12. USASAFD Form 2254-R Artillery Safety Card/Fan	pg. 316
R - 13. USASAFD Form 2255-R Mortar Safety Card/Fan	pg. 318
R - 14. USASAFD Form 2256-R SDZ Info Sheet	pg. 320
R - 15. USASAFD Form 2257-R Mk-19 Cleanup Agreement	pg. 321

## **Chapter 1**

### **General**

#### **1-1. Purpose**

This pamphlet provides a guide to the U.S. Army Support Activity (USASA) Fort Dix ranges and training areas, with a single reference for Range/Training Area Standard Operating Procedures (SOP).

#### **1-2. Applicability**

USASA Fort Dix Pam 350-3 applies to the following organizations and/or personnel who seek access to any part of the USASA Fort Dix Range Complex:

- a. All Army, Navy, Air Force, Marine Corps, and Coast Guard units, directorates, staff sections, and other U.S. military organizations (e.g., ROTC detachments and Recruiting Offices).
- b. All tenant organizations physically located on JB MDL regardless of military affiliation.
- c. All non-DoD Federal agencies and any political subdivision thereof.
- d. All state and local law enforcement agencies and any political subdivisions thereof, that are authorized use of USASA Fort Dix ranges in accordance with (IAW) current Installation Command Policy.
- e. All other civilian and/or private organizations/individuals that are authorized use of USASA Fort Dix ranges IAW current Installation Command Policy.
- f. Any other organization or individual who has received express written permission from the Installation Commander (e.g., Employer Appreciation Day, elected officials, government inspectors, and investigators).

#### **1-3. General**

The Range Guide is a handbook about USASA Fort Dix ranges and training areas (facility specifics in Appendixes D and E) with operational policies, procedures, and responsibilities. Submit changes, comments, and recommendations about USASAFD Pam 350-3 on DA Form 2028 to the proponent, Training Division (TD), DPTMS, Building 5513 Texas Avenue, telephone (609) 562-2001.

#### **1-4. Administrative and/or Punitive Consequences for Non-Compliance**

Military or civilian personnel who violate the provisions of this pamphlet may be subject to adverse administrative action. Military personnel may also be subject to action under the Uniform Code of Military Justice (UCMJ).

## **Chapter 2**

### **Coordination**

#### **2-1. Directorate of Plans, Training, Mobilization and Security (DPTMS)**

DPTMS provides direction, supervision, and resourcing required to operate, conduct, and maintain the range complex and all training facilities within the scope of USASA Fort Dix and Department of the Army Directives.



## **2-2. Training Division (TD)**

- a. Oversees range and training area activities and provides guidance for future development.
- b. Provides ammunition management assistance by verifying and approving valid requests to pick-up ammunition at the USASA Fort Dix Ammunition Supply Point (ASP); by guiding units in appropriate request and procurement process; and providing technical guidance to meet mission requirements.
- c. Provides Integrated Training Area Management (ITAM) support from the Army Sustainable Range Program (SRP) through range and training land evaluation, development and management, and Land Rehabilitation and Maintenance (LRAM) projects. Develops and maintains range Geographic Information System (GIS) data layers and conducts range mapping services.
- d. Hosts a Quarterly Training Meeting covering the following quarter's scheduled training and including information on current operations and future exercises which may impact training plans.

## **2-3. Range Operations**

- a. Controls and supervises the overall operation of the range complex to include check-in, utilization and clearance of facility users.
- b. Develops and enforces compliance with range firing and safety procedures.
- c. Operates the Range Operations Firing Desk during all scheduled activities and maintains records of calls and reports pertaining to range accidents/incidents.
- d. Requisitions, stores, and issues range supplies and equipment.
- e. Fabricates range support equipment.
- f. Supervises the inspection, maintenance, and police of buildings, grounds, and other structures within the range complex.
- g. Coordinates with EOD for disposal of UXOs.
- h. Approves all non-standard training plans.
- i. Verifies and approves all direct and indirect fire safety data and SDZs.
- j. Coordinates with McGuire RAPCON and the FAA for all activities within Special Use Airspace (SUA) R5001 A&B.
- k. Approves requests for entry into impact areas and vehicular movement within restricted access areas.
- l. Maintains automated target equipment.
- m. Provides unit training on operation of all automated ranges and conducts standby support during all automated range scheduled use.
- n. Provides inspections of all range and training areas.
- o. Provides area availability to Resource Management for MWR use during the hunting season and for resource gathering throughout the year.

## **2-4. Ammunition Supply Point (ASP)**

The ASP at JB MDL is a separate Army operation from USASA Fort Dix and reports directly to Logistics Readiness Command (LRC).

- a. Receives, stores, and issues ammunition IAW Army Regulations and internal SOPs.

- b. Receives and processes ammunition residue material: cans, boxes, brass, links, etc.
- c. Provides notification of ammunition restrictions and suspensions.
- d. Investigates ammunition malfunctions.
- e. Participates in the ammunition amnesty program by providing a receiving box at the entrance to the ASP for small arms ammunition, .50 cal and below. **NOT INTENDED TO BYPASS LOCAL TURN-IN PROCEDURES.**

#### **2-5. 87 CES (Civil Engineer Squadron)**

- a. Provides range fire prevention and control measures through close coordination with Range Operations.
- b. Provides construction, repair, and maintenance support beyond Range Operations capability.
- c. Provides environmental and conservation support.
- d. Provides trash removal, dumpster support, and latrine servicing for both fixed and portable latrines.

#### **2-6. 87 SFS (Security Forces Squadron)**

Provides law enforcement activities within the USASA Fort Dix area of operations.

#### **2-7. Network Enterprise Corporation (NEC)**

- a. Installs and maintains all range telephone communications equipment. NEC is the only authorized organization to connect, repair, modify, or move cantonment or range communications equipment.
- b. Coordinates and assigns available radio frequencies to be used by units training at USASA Fort Dix.
- c. Approval/Disapproval authority along with 87 CES for units requesting to erect communication equipment and wire in support of training events. All wire and communication equipment will be removed at the conclusion of each exercise.
- d. Provides a very limited secure communications capability within DPTMS Building 5435, 6th Street. Use of these services must be coordinated through TD (609) 562-2001/2002/2003.

#### **2-8. Explosive Ordnance Disposal (EOD)**

The 87 CES/EOD provides teams to conduct operations to identify and mitigate hazards associated with unexploded ordnance within the USASA Fort Dix Area of operations. Response is limited to emergency requests and any planned operation must be sourced by Department of the Army through individual unit requests.

#### **2-9. Emergency Medical Support**

Ambulance support to the range/training complex is provided by contracted civilian ambulance Basic Life Support (BLS) technicians, which can be obtained by contacting the Range Operations Firing Desk at (609) 562-4600/4650. All transport will be by Range Operations Medics. Units are required to provide basic life support.

## **2-10. Training Units**

All organizations using USASA Fort Dix ranges and training areas will maintain communications with the Range Operations Firing Desk at (609) 562-4600/4650 in order to maintain situational awareness and report all unlawful activity, incidents, and medical emergencies. The Range Operations Firing Desk maintains contact with all emergency services providing support to the ranges and training areas and is the fastest means of providing timely response.

## **Chapter 3 Administration**

### **3-1. Range Operation Facilities and Hours**

a. Range Operations is responsible for all ranges, training lands, and training facilities located within the training lands. The Range Control Officer is the ASA Commander's representative and authority for all matters pertaining to weapons firing and training conducted at JB MDL.

b. Range Operations Headquarters is located in Building 9013 Range Road, JB MDL, New Jersey 08640, telephone (609) 562-4600/4650. The Range Control Officer, Range Safety Office, Training Scheduling/Coordinator, Range Support QAE, Supply, Range Medics, and the Range Operations Firing Desk (Range Communications) are all located in Building 9013.

c. Range Operations Headquarters is open 24 hours daily and only closes Christmas and New Year's Eve then reopens on the 26th of December and on 2nd of January at 0600 hours. The emergency line is 609-562-4600 and the administrative number is (609) 562-4650.

d. Range Support personnel located in Building 9003 provide all range maintenance to targets and range support equipment. Range Support personnel are the only authorized personnel to provide maintenance on the ranges; unit personnel are authorized to construct objects and targets in support of their approved lesson plans on their scheduled ranges under the supervision of range support personnel. Hours of operation are 0745-1530 daily with personnel on call while automated ranges are operational.

### **3-2. Range Supplies, Targets and Equipment**

a. Units will report to Range Operations Headquarters at Building 9013 to check in and receive credit for their facilities. Equipment to operate range/training facilities will be signed for on DA Form 2062 by unit representatives who have current Range Safety Certification from USASA Fort Dix. The following equipment is required to operate training sites:

- (1) Ranges:
  - (a) Range Book
  - (b) Motorola hand-held radio
  - (c) Red range flag
  - (d) Hand-held microphone for speaker system / Megaphone system
  - (e) Keys for structures

- (f) Safety Paddles and brass clearing rod
  - (g) Telephones are located at the base of the tower
- (2) Artillery / Mortar firing points
  - (a) Range Book
  - (b) Motorola hand-held radio
  - (c) Red range flag
  - (d) Telephones are located on a telephone pole near the entrance
- (3) TAC Areas
  - (a) Range Book
  - (b) Motorola hand-held radio
  - (c) Keys for structures located within the TAC Areas
- b. Targets are ordered at the 10-day Out Final Coordination Meeting for your training dates and will be located within the ammunition point on your zero range.
- c. Any unit requiring non-standard equipment or set-up of their ranges must coordinate in writing a minimum of fourteen (14) days prior to planned use with the range support section.
- d. Automated targets are maintained by the range support section and PMCS is performed daily during range operations from 0730 until 0800; no unit will be given permission to place a range in a hot status prior to 0800. When conducting night fire, support personnel will place ranges into a cease fire for approximately one (1) hour to configure the range for night fire.
- e. Any unit found to have conducted maintenance or attempted repair of automated targets will be held liable for any damage to the targets or target system. Should a unit encounter problems with targets, please report it on your range clearance sheets, the customer survey form, or through the Interactive Customer Evaluation System ICE.

### **3-3. Security and Safeguarding Ranges and Equipment**

- a. Personnel using USASA Fort Dix ranges and training areas must adhere to service specific security regulations with operational security awareness in all security disciplines. Nonaffiliated personnel requesting access to USASA Fort Dix ranges and training areas must contact the Public Affairs Office (PAO) at (609) 562-4035 or the 87 SFS at (609) 562-6001. It is a crime to reproduce, publish, sell, or giveaway any photograph, picture, or graphic representation of defense installations without receiving permission from the Installation Commander. Personal photos or videos in restricted or mission sensitive areas requires PAO approval prior to posting in public venues. Report any suspected surveillance or anti-terrorism activities to Range Operations, 87 SFS, and/or to the 1-800-225-5779 suspicious activity reporting tip line.
- b. All range operations equipment signed for by a unit must be safeguarded, secured, and accounted for IAW AR 190-51, Security of Unclassified Army Property (Sensitive and Non-Sensitive) and AR 735-5, Property Accountability Policies.
- c. The hand receipt holder is responsible for turning in statements for all lost or damaged equipment. The range supply section will then determine which actions to take under the Command Supply Discipline Program (CSDP).
- d. Buildings located in the range and training areas are not considered secure; unit equipment will be guarded at all times. Radios, telephones, night vision devices,

weapons, ammunition, and any other sensitive equipment when lost will be reported to Range Operations, 609-562-4600, immediately.

e. Immediately notify Range Operations if evidence of a break-in has occurred or damage to facilities or equipment is found. The area must be guarded, potential evidence must not be disturbed, have a unit member await the arrival of a range representative and members of the 87 SFS to initiate a response.

### **3-4. Facility Utilization**

a. Units must request use of all facilities through the Range Facility Management Support System (RFMSS) and are only authorized to use areas that have been approved by the Training Coordinator. A final coordination meeting is held every Wednesday 10 days prior to battle assemblies to finalize all requests and coordinate all logistical support. Changes are not authorized after the final coordination meeting without the approval of the Range Control Officer or Training Division Chief.

b. Statistics reflecting actual utilization of scheduled facilities, which impacts funding and scheduling decisions, are maintained in RFMSS. In order for a unit to be credited for a use of a facility, the scheduled unit must open and close the facility IAW procedures contained in Chapter 5, paragraph 5-7 and 5-12 of this pamphlet. Failure to properly open and close facilities may impact a unit's future requests to use our facilities.

c. Units who have completed all training and desire to conduct supplemental training are able to do a same day request, which authorizes the unit to use a facility that day and that day only. The facility must be cleared by close of business so that the facility is able to be used the next duty day.

### **3-5. Privately Owned Vehicles (POV) Usage**

JB MDL shares many of its roads with the county and State of New Jersey. Civilian traffic is prevalent in many areas, and access poses law enforcement with a myriad of problems. As such, situational awareness and caution are a must. Limited POV usage by units is highly encouraged within the ranges and training areas; tactical vehicles have priority of use and any POV posing a hazard or interfering with the right of way of tactical vehicles will be requested to depart the range or training area.

### **3-6. Water**

Units are responsible for containerizing and transporting drinking water to their training sites. Potable water points are located at WK361271 (Range Road IVO Lake of the Woods), WK387272 (Range Control Headquarters Building 9013), WK471260 (Times Square), WK483282 (Bivouac 18), WK469298 (Bivouac 20), and WK 464316 (Bivouac 22A). The water lines are used infrequently enough that rust will build up in the lines. Units are required to allow the water to run in order to clean out the rust and other foreign matter; test the water in 15-minute increments to see if it is pure enough to use up to 1 hour. If after an hour it's still not clear enough, contact the Range Operations fire desk (609) 562-4600 so that a work request can be called into the water department.

### **3-7. Medical Support**

a. Specific unit medical and training responsibilities are outlined in greater detail in Chapter 8 of USASA Fort Dix Regulation 350-3 to include credentialing requirements for organic medical personnel, medical supply procedures, and required unit preventive procedures.

b. Appendix L, Emergencies, of this pamphlet contains emergency medical support procedures for the range complex and adjoining training areas. Only Range Operations has evacuation authority. Units with organic ambulance support may not transport personnel without specific direction from the Range Operations Firing Desk. For emergency medical situations, contact the Range Operations Firing Desk on Motorola channel 1, telephone (609) 562-4600, the 24-hour emergency line (609) 562-4650, or FM radio channel 34.30.

(1) Primary medical and ambulance support is available at the range complex and is provided by civilian contractors with Basic Life Saving (BLS) certification. The ambulance has contact with New Jersey County Advance Life Saving (ALS) certification personnel and when required will coordinate for link-up in route to the hospital.

(2) Secondary evacuation is provided by 87th Medical Group ambulance service.

(3) Aero medical evacuation is provided by the New Jersey State Police and the New Jersey State Flight for Life Program. Request for support is made by the range ambulance through the 87 CES/CEF (fire department).

(4) Units will provide basic first aid support to all ranges and training areas they utilize.

(5) The 87th Medical Group does not provide emergency medical treatment. All injured personnel are evacuated to local community hospitals. Units are required to pick their personnel up from the facility when they are released; directions to the hospital can be obtained from the Range Operations Firing Desk.

(6) The unit will provide a USASAFD Form 2253-R, Accident/Incident Report, immediately after the incident but no later than the beginning of the next day of training or prior to the unit clearing facilities. Follow-up reports will be submitted IAW service specific accident reporting requirements with a courtesy copy submitted to the Range Safety Office.

c. Sick Call is provided by the 87th Medical Group at their clinic at 3458 Neely Road, behind the Commissary/BX/PX facility 3458 Wonnacott Avenue, phone 1-866-377-2778. Service members should report to the records section by 0730 and request a sick call appointment. The Medical Group will give the service member a time to return to the nurse's station for the appointment. Service members need a copy of their orders and an ID card. Appointments are limited and they are only open Monday thru Friday, closed on weekends and holidays. If sickness occurs after hours, on weekends, or holidays, service members must report to the Deborah Hospital emergency room at 200 Trenton Road, Browns-Mills New Jersey 08015, approximately 2 miles straight (South) from the Texas Avenue Gate. Service members are required to have an ID card and a copy of their orders.

## **Chapter 4**

### **Range Complex Communications**

#### **4-1. General**

a. The Range Operations Firing Desk is the focal point for all communications; they are located in Building 9013 Range Road. The 24-hour emergency line is (609) 562-4600, the administration line is (609) 562-4650. All units training at USASA Fort Dix ranges and tactical areas will maintain communications with the Range Operations Firing Desk at all times. It is the unit's responsibility to establish and maintain communications.

b. The primary means of communications is by telephone for ranges and bivouac sites; a telephone is located on all range towers and on a telephone pole within the bivouac sites. Units should identify the number for the areas they will occupy and share that information with unit members.

c. An alternate means of communication:

(1) Motorola Radio, which is issued from Range Operations when signing for ranges, TAC Areas, and separate training sites. The radios are preset to the frequency and channel for organizational operations.

(2) Aerial Gunnery will use FM radio:

(a) Primary Frequency - 34.30 New Squelch On

(b) Alternate Frequency - 36.30 New Squelch On

(3) FM channels are only monitored during scheduled aerial gunnery so other units wishing to communicate with range operations via FM should notify the Range Operations Firing Desk technician to initiate FM monitoring.

d. All live fire ranges, artillery, and mortar firing points will establish and maintain two (2) means of communication. If either system goes down, the range will go to an immediate cease fire. They will not resume firing until they have reestablished both means of communication and have received permission from the Range Operations Fire Desk to go to a hot status.

e. When occupying a range or firing point, contact Range Control by phone at 609-562-4600, this will establish your primary means of communication. If the line is busy, continue to call until you get through; many times the call line traffic is heavy because multiple units are attempting to occupy.

f. Aerial gunnery will establish and use FM radios as the primary means of communication with the Range Operations Firing Desk on channel 34.30, Alternate 36.30.

g. Artillery units desiring to use the Battalion Fire Direction Center (FDC) to control their battery's firing must coordinate prior to the day of firing in order for the Range Operations Firing Desk to be aware. The FDC can request occupation, wet times, dry times, and cease fire notifications for their batteries if they maintain two forms of communications with all their elements to include the Observation Post (OP). The FDC will maintain two forms of communication with Range Operations Firing Desk; the firing units will monitor Range Control frequencies for emergency information.

h. Range OIC will maintain communications with all vehicles firing and all aircraft conducting aerial gunnery. If communications is lost with any vehicle or aircraft, an

immediate cease fire will be called and the vehicle/aircraft will be moved off the firing line until communications can be reestablished.

#### **4-2. Radio Procedures**

- a. Call signs on the range firing NET:
  - (1) The call sign for Range Operations Firing Desk is (Range Control).
  - (2) Units are identified by the facility they are using and their unit number i.e., "Range Control this is 389 Eng. on TAC 3C".
- b. Approved calls on Range Operations NET are:
  - (1) Request for MEDEVAC
  - (2) Request for Cease Fire
  - (3) Other requests for support or assistance from Range Control

#### **4-3. Installed Phone System**

- a. Phones are installed inside call boxes.
  - (1) Range call boxes are at the base of the tower.
  - (2) Artillery/Mortar points are installed on a telephone pole at the entrance to the site.
  - (3) Bivouac sites are installed on a telephone pole located somewhere within the site.
- b. Range complex phone lines are Class C lines for official business only. Units requiring a Class A line must go to Range Operations Bldg. 9013 Range Road.
- c. A telephone directory is located in Appendix T.

#### **4-4. Unit Internal Frequencies**

Units will request frequencies from the NEC on the ASA Fort Dix Training Support Request Form 2203. No channel utilized by Range Operations is authorized to be used by any unit for internal communications.

#### **4-5. Emergency Communications**

Units may use any of the above-mentioned forms of communication to contact Range Operations in an emergency. All units monitoring the radio will cease their communications until the emergency has been resolve. The 24-hour Range Operations Emergency Number is (609) 562-4600.

### **Chapter 5**

#### **Range and Training Area Operational Procedures**

##### **5-1. General**

The following Chapter and Appendixes describe our local operating procedures and policies. Adherence to the instructions will enable you to safely complete your training event. Units wishing to deviate from this manual and conduct training events not specifically addressed in the manual will submit a request in writing describing the operation they wish to conduct along with justification for the training, operation plan, risk assessment, and overlays as appropriate.



## **5-2. Officer-in-Charge (OIC) and Range Safety Officer (RSO) Certification**

a. All organizations training at USASA Fort Dix are required to have individuals certified by their chain of command on the weapons being used in the training they will conduct. Commanders in the grade of O-5 or above must submit in writing that the personnel are trained. Civilian law enforcement and all other organizations must have a Command Officer or senior training instructor certify. When Range Operations receives the commander's certification, OIC and RSO personnel are then required to complete the OIC/RSO training and pass the certification test at Range Operations. Range certification is a requirement to sign for facilities and equipment from Range Operations. Grade requirements for OIC and RSO are found in Appendix B, Table B-1.

b. The OIC is responsible for the conduct of training and the adherence to all governing regulations and guidance; they must always be able to influence the conduct of the events. OICs will be certified on the weapon system for which they are responsible. For aviation weapon systems and weapons systems equipped with, or dependent on, lasers, the OIC must be knowledgeable and certified on each system.

c. The RSO will be weapon system qualified and have no other duties assigned while performing as RSO. The RSO must be positioned on the range so as to be able to immediately stop any unsafe acts by overseeing all supporting safeties.

d. Certification Process:

(1) The unit commander O-5 or above will first submit in writing that personnel selected for OIC and RSO duties have been trained and certified on the weapon system they will use and the training they will conduct at USASA Fort Dix. The certification will be a by name roster with each weapon identified. See Figure 1.

(2) After receipt of the letter by Range Control, unit personnel can check in at Range Operations Bldg. 9013 Range Road where they must view a training video and complete a 20-question test on the content of the video. After receiving an 80% grade to pass, they will be entered into RFMSS and their certification is valid for two (2) years. The following topics are covered in the video:

(a) USASA Fort Dix training and Commander, OIC, and RSO responsibilities.

(b) Information on communications, accident/incidents, HAZMAT, and environmental hazards.

(c) Ammunition procedures.

(d) Required Reports.

(3) Civilian agencies will have personnel certified and they must be 18 years of age or older. Civilian agencies will have a firearms instructor or an individual with command authority within the organization certify in writing that the individuals are certified and competent in the training they will conduct at USASA Fort Dix.

e. Range certification is conducted:

(1) Monday thru Thursday every odd hour from 0900-2100

(2) Friday and Sunday every hour from 0900-2100

(3) Saturday from 1200-2100

(4) The video will start at the top of the hour and no one will be allowed in once the video starts; report in early enough to be checked in through use of your organizations command certification letter.

### **5-3. Range Decertification and Recertification Procedures**

a. Decertification is removal from the standing list of OICs & RSOs for a period of not less than 60 days. Personnel violating safety, security, and or local operating procedures and policies may be decertified. When a unit OIC or RSO is decertified, the unit must immediately cease training until such time as a certified OIC or RSO from the unit is present on the range and identified to Range Control as the replacement. The certifying commander will be notified in writing of the decertification and the basis for decertification along with the recertification requirements.

b. The basis for decertification includes, but is not limited to:

- (1) Failure to monitor and respond to range communications.
- (2) Failure to follow training area special instructions, i.e., using aerial flares in prohibited areas.
- (3) Continuing to fire during a Range Operations initiated cease-fire.
- (4) Failure to report a range fire.
- (5) Failure to adequately protect ammunition and equipment in the range area.
- (6) Failure to submit required reports.
- (7) Noncompliance with Range Operations directives.
- (8) Failure to follow published safety directives and guidance in AR 385-63, weapons technical manuals, USASA Fort Dix Reg 350-3, USASA Fort Dix Reg 95-1, or this pamphlet.
- (9) Failure to follow USASA Fort Dix medical procedures as outlined in this pamphlet.
- (10) Loss or damage to range facility equipment.

c. Recertification will consist of:

- (1) Written certification by the O-5 within the chain of command that the individual has undergone retraining and is now qualified to train with the weapon systems and training to be conducted.
- (2) The individual will once again review the video then take a 50-question test from both the video and the USASAFD Pam 350-3 open book. The test will start by viewing the video at the top of the hour and the test will end at the end of that hour.

### **5-4. Access to Ranges, Training Areas, and Impact Areas**

Unauthorized entry into the USASA Fort Dix training complex is prohibited. The Range Control Officer is the approval authority for entry to the ranges, training areas, and the Impact Area.

a. Personnel authorized to enter the ranges and training areas:

- (1) Military and civilian personnel assigned or attached to an organization operating a range or a training area. This applies only to the particular range or training area being utilized by the organization.
- (2) Personnel assigned or attached to Range Operations.
- (3) Personnel utilizing Range 14 (MWR) during normal operating hours.
- (4) Personnel with written consent of the USASA Fort Dix Commander.

b. All personnel wishing to proceed down range past their authorized area, i.e., 25-meter target frames on a zero range, will contact the Range Operations Firing Desk and request permission to go down range. Once permission is granted, proceed down range, conduct your business, proceed back up range, and check back up range with

the Range Operations Firing Desk. Personnel unfamiliar with the range area will be escorted by someone from Range Operations.

c. Access into the Impact areas of the range requires a safety briefing from the Range Safety Office about the hazards of UXOs and will require de-confliction with other operational ranges.

### **5-5. Training Hours**

a. The entire ASA Fort Dix Range complex is closed from 0700-0800 daily for maintenance and targetry services.

b. Live fire on ranges is permitted as scheduled in RFMSS at all times outside of the 0700-0800 maintenance period with the following exceptions:

(1) Artillery and mortar fire is restricted to 0800-2300 hours daily.

(2) Artillery Fire Point (AFP) 17 is limited to 0800-1800 hours daily.

(3) Ranges 19-24 firing times are limited to 0800-1800 daily.

(4) Direct fire weapons above caliber .50, demolitions, and other explosives may be restricted on a case-by-case basis.

(5) Cease fires for range projects, safety, or other purposes approved by the Range Control Officer will be published on the USASA Fort Dix RFMSS Range Bulletin.

c. TAC Areas and Bivouac sites may be used 24-hours per day when scheduled in RFMSS.

d. All other training sites and facilities may be used as scheduled in RFMSS.

e. At times there will be scheduled cease fires; normally these times will be published in the USASAFD Range Bulletin.

### **5-6. Actions before Training/Firing**

The OIC will ensure:

a. Establish communications with Range Operations.

b. A red flag or red light (night fire) is properly displayed.

c. All necessary guards and/or barriers are in place.

d. Safety briefings are conducted.

e. Limit markers are in place and visible/lit if night fire.

f. Ammo point guards are posted.

g. All vehicles are parked in designated areas.

h. All ammunition is checked for mixture; specifically for exercises where blank and ball ammunition are used.

i. All ROTC units and equivalents must have at least one Cadre person in charge at each range ammunition supply point and at least two Cadre must be present in each training area in use.

### **5-7. Occupation Time Procedures**

a. All units will call Range Operations Firing Desk to request an occupation time; it must be done as soon as the unit arrives on site. All facilities will be occupied daily regardless of the length of stay and they must be occupied the day of departure prior to receiving an inspection.

b. The request will be made by calling 609-562-4600.

c. Units will provide the following information when occupying:

- (1) Unit designation
  - (2) OIC initials and card number
  - (3) Total number of personnel occupying the site
  - (4) Total number of vehicles on site
  - (5) If occupying a TAC Area, you must give a six-digit grid for the Command Post.
- d. The Range Operations Firing Desk technician will issue the unit an occupation time, their initials, and record the occupation in the duty log.

#### **5-8. First Round Procedures**

- a. All units conducting live fire or training with pyrotechnics, blanks, and smoke munitions must request a First Round Time prior to beginning firing.
- b. Direct fire ranges will use the telephone, 609-562-4600, and indirect fire may use Motorola radio, aerial gunnery will use FM 36.30.
- c. When requesting First Round Time, units will submit the following information:
  - (1) RSO initials and card number
  - (2) DODIC for all ammunition to be used
  - (3) In addition, Artillery/Mortars provide the following:
    - (a) Safety Fan Control Number
    - (b) Max Ordnance in feet
    - (c) Planned Grid Coordinate of Ordnance Impact
- d. For direct fire ranges, Range Control will issue a First Round Time and their initials. At this time, units may begin firing.
- e. Indirect firing units must also deliver the OIC/RSO checklist to the Range Operations Firing Desk so that airspace can be raised to 8000 feet. At that time, units will be authorized to fire one spotting round which forward observers must plot and report the grids to the Range Operations Firing Desk. When the round is plotted within the impact area, Range Control will issue a firing time with initials which means units may begin firing.
- f. Once a Range Control OIC receives a First Round Time and initials from Range Control, the range is in a hot status. The range remains in a hot status until such time as the unit Range OIC receives a Dry Time or a Cease Fire from Range Control.

#### **5-9. Actions during Training/Firing**

- a. The OIC will ensure the radio is monitored for hourly radio checks initiated by Range Operations Firing Desk; monitor the radio for safety information i.e., immediate order to go to cease fire status, weather precautions, and vital safety information.
- b. All range fires must be reported to Range Control immediately.
- c. All personnel remain in proper uniform.
- d. Training is monitored for safety violations and on the spot corrections are implemented.
- e. When requested by Range Operations Firing Desk, Air-Guards are posted to watch for aircraft flying IVO firing.
- f. Units occupying a location overnight are required to contact the Range Operations Firing Desk prior to 2300 to inform them of plans to remain overnight, then reoccupy the range after 0800 the following day.

### **5-10. Dry Time Procedures**

- a. A Dry Time is when units have finished firing and training is complete for the day.
- b. A temporary Dry Time is when units wish to pause firing for thirty minutes or longer; a new First Round Time must be obtained from the Range Operations Firing Desk before firing may resume.
- c. When requesting an end of training Dry Time, the unit will report the number of rounds fired by DODIC.
- d. The Range Operations Firing Desk technician will issue a Dry Time with their initials.

### **5-11. Actions after Training/Firing**

The OIC will ensure:

- a. Range flag is lowered.
- b. Guards are recalled and barriers are removed.
- c. Weapons are cleared and all personnel are checked for brass and ammo.
- d. Thorough police call is conducted and all trash and litter removed from the facility.
- e. All structures are cleaned and secured.
- f. Facilities will be cleaned at the end of each day of training; however, on your final day of training, a joint inspection with Range Operations will be conducted.

### **5-12. Clearance Departure Procedures**

- a. Units completing training will conduct a joint inspection with Range Operations.
- b. Facility inspection sheets are contained in the binder issued with each facility. It is in the unit's best interest to conduct a pre-inspection using the sheets prior to beginning training because failure to report discrepancies may leave the unit liable to charges.
- c. Facility clearances will only be conducted during daylight hours. Units conducting night training will be required to come back the next day in order to clear.
- d. Organizations failing inspection will be notified of the discrepancies and required to request a re-inspection once the deficiencies have been corrected. On a heavy weekend, facilities will be cleared as they are called in so failing an inspection will place a unit at the bottom of the clearance list.
- e. Units training for multiple days on a facility are required to maintain the area in a high state of police daily and only request an inspection on their last day of training.
- f. After inspection is complete, secure all structures by turning off all lights and locking all doors then proceed to Range Operations to turn-in issued equipment. Units are required to present their completed inspection sheet and a customer survey if they have any issues they wish to address with the Range Control Officer.
- g. All garbage and recycle materials will be taken to the Range Operations Bldg. 9013 where there are dumpsters for each material. All ammunition residue to include brass, banding material, ammunition cans, and any other packaging materials along with any wooden pallets will be returned to the servicing ASP, MSA, or municipal/state facility.

### **5-13. Publications/Paperwork**

The OIC will ensure that the following publications and paperwork are complete and on site:

- a. USASA Fort Dix Map, 1:50,000 DIXJMTTC 001
- b. USASA Fort Dix Reg 350-3
- c. USASA Fort Dix Pam 350-3
- d. USASA Fort Dix Range Bulletin
- e. Appropriate Regulation, Training Pamphlet, Service Guidance, and/or TMs for training being conducted and equipment being used
- f. Approved overlays for ruck marches or smoke operations being conducted
- g. Approved indirect fire Safety Fans, SDZs for mortars and artillery
- h. Approved digging request
- i. Risk Assessment Worksheet signed by appropriate level command for the operation. This is a mandatory requirement from the DoD and all services will be required to have a completed one on site or training will be halted until one is completed. This requirement applies to any agency training at JB MDL.

### **5-14. Roads, Gates and Barriers**

a. Only Range Operations may grant permission to close or block any road on ASA Fort Dix. Units desiring to close roads for training purposes will submit a request with an overlay stating the dates and times of closures; the request must be made NLT the 10-day Out Final Coordination Meeting for the time period. Hard surface roads are shared roads with the state and normally will not be closed for any reason.

b. Range service roads and firebreaks (trails within the down range impact areas) are off limits.

c. Gates are located throughout the range complex for safety purposes; only Range Operations may grant permission to bypass a closed gate. The gates are located at:

- (1) East end of NW Tank Trail IVO Range 1
- (2) West end of NW Tank Trail IVO Range 6A
- (3) Intersection of Grand Concourse and Route 70
- (4) Route 539 and Pinehurst Road (Hole in the Wall)
- (5) East End of Archer Town Road (RG 85)
- (6) West End of Hockamick Road IVO Brindle Lake
- (7) The top of Range 85 (three gates)

d. Barriers:

(1) Units are responsible for placing barriers as prescribed in the special instructions for a facility and IAW a unit CONOP.

(2) Permission from Range Operations is required to bypass any barrier.

(3) All barriers will be marked with the ongoing mission and must be illuminated at night, or a guard must be posted.

(4) Barriers will be easily moveable to be bypassed during emergencies.

(5) When mission is complete, all barriers will be removed and returned to storage.

### **5-15. Downrange and Impact Area Control**

- a. Personnel are not allowed down range past established target frames on 25-meter, 10-meter zero ranges, or into the impact area without Range Operations approval.
- b. Requests for permission to go down range must be made to Range Operations with justification, time required for mission, and exact location. Written request will be submitted to the Range Safety Office NLT 10 working days prior.
- c. Units will not place targets, other structures, or materials on ranges without permission from Range Support Supervisor and Range Safety Officer. The use of glass, reflective materials, or laser reflective materials are not authorized in the impact area.
- d. Units will contact Range Operations Firing Desk prior to entering impact area for permission to proceed. Units will inform the Range Operations Firing Desk of the number of personnel and vehicles in the party; units must maintain communications with the Range Operations Firing Desk while down range. When exiting, units will contact the Range Operations Firing Desk to inform them when all personnel are clear of down range.

### **5-16. Off Limits Areas**

- a. All ranges and training areas are off limits except for personnel with a reservation for training, maintenance personnel, and scheduled hunting.
- b. Unit training is prohibited:
  - (1) Within 50 meters of any helicopter pad, except when training involves aircraft or emergency evacuation is in progress.
  - (2) Within 50 meters of ammunition storage area on a range.
  - (3) Within 100 meters of family housing, except where a fixed training facility exists.
  - (4) Within the USASA Fort Dix Impact Area.
  - (5) Within the restricted area inside of TAC 2B.
  - (6) South of Range Road from Range 19 thru 38, except when in an assigned TAC Area.
  - (7) On hard surface roads, except for convoy operations; tactical engagements are prohibited.
  - (8) In the BOMARC Site (WK T47703130)
  - (9) In the Hanover Furnace historic site (WK S40502560)
  - (10) Within the Ammunition Supply Point (ASP) safety zone (VIC WK S36502900)
  - (11) Any other areas designated as restricted access or off limits by Commander JB MDL, Commander USASA Fort Dix, Director DPTMS, or USASA Fort Dix Range Control Officer.

### **5-17. Training Accidents and Incidents**

See Appendix L for required actions and reports involving training accident/incidents. When inside the range and training areas, dial (609) 562-4600, Range Operations Firing Desk, to obtain emergency service or support. Training accident/incidents include but are not limited to the following:

- a. Ammunition/weapons malfunctions
- b. Personnel injuries
- c. Found ammunition
- d. Range fires
- e. Erratic rounds (rounds fired out of impact)
- f. UXO
- g. Lost weapons
- h. Aircraft accident/mishaps
- i. Vehicle accidents
- j. Damage to real Property or Range infrastructure.

#### **5-18. Uniform Standards**

- a. Uniform requirements are determined by service specific regulations and command directives.
- b. Specific uniform safety requirements will be identified in the special instructions for the different facilities and will be adhered to by all organizations.
- c. Simunitions, Ultimate Training Munitions (UTM), Close Combat Mission Capability Kit (CCMCK), and other similar paint ball or wax marking force-on-force training rounds present special safety precautions. The following guidelines will be followed unless a manufacturer proposes stricter standards:
  - (1) All skin will be covered.
  - (2) Individual body armor with combat helmet will be worn.
  - (3) Full eye, face, and neck protection will be worn.

#### **5-19. Personal Weapons**

The firing of personal weapons on the range complex is prohibited except for the following:

- a. Civilian law enforcement personnel on scheduled ranges.
- b. Personnel utilizing Moral Welfare and Recreation (MWR) Range 14.
- c. Hunters in specified hunting sites during approved hunting season.

#### **5-20. Armor Defeating Weapon Systems**

Only direct fire at point targets is allowed on USASA Fort Dix Range Complex. Only one anti-armor weapon may be fired at a time.

#### **5-21. Airspace Safety Restrictions**

- a. Special Use Airspace has been assigned to USASA Fort Dix Commander to accommodate weapons firing; the two airspace designations are:
  - (1) R5001A: surface to and including 4000 ft. Mean Sea Level (MSL), 0600-2330 local time daily.
  - (2) R5001B: from 4000 ft. MSL to and including 8000 ft. MSL, continuous from sunrise Friday thru sunset Sunday, other times by NOTAM 48 hrs. in advance.
- b. Ranges firing .50 cal ammunition will require airspace to be set at 4000 ft.
- c. Indirect weapon systems (mortars & artillery) require airspace to be set at 8000 ft.



d. Request to utilize airspace other than the limits imposed in paragraph 5-21.a. will be identified to the Range Safety Officer during the 10-day Out Final Coordination Meeting so coordination can be made with the Federal Aviation Administration (FAA) and the 87th Air Operations. The units' failure to identify their requirement is justification to cancel their training reservation.

## **5-22. Disposition of Misfires and Unexploded Ordnance (UXO's)**

a. Misfires are the failure of the propellant charge to ignite wholly or in part and will be handled:

(1) IAW the weapon systems misfire procedures contained in the relevant manual, the initial procedures are performed by the firer and unit.

(2) After removal from the weapon, place the projectile into the original packaging container, mark the container as containing a misfired projectile, and keep separate from serviceable ammunition.

(3) Turn the misfire into ASP personnel for disposition.

b. UXOs are any explosive munition which has been fired or otherwise activated and has failed to detonate. When a UXO is found, do the following actions:

(1) Do not touch or disturb the item.

(2) Clearly mark the item with engineer tape or other recognizable means.

(3) Depart the area and contact the Range Operations Firing Desk (609) 562-4600 to report the location and description of the item found.

(4) Await the arrival of a Range Operations representative or the EOD team.

(5) Remain on site to assist if necessary or until relieved by the EOD team.

c. When operating Range 3B, fragmentation grenade range, grenades that fail to detonate will be called in immediately and the lane will be closed until EOD responds to take care of the UXO. The alternate lane may continue to operate until EOD arrival.

## **5-23. Demolition Exercises**

a. Main charge explosives, i.e., TNT, C-4 will be detonated by:

(1) Time blasting fuse (safety fuse) and non-electric blasting cap.

(2) Blasting machine, firing wire, and electric blasting cap.

(3) Remote electric firing machine.

(4) Improvised methods of initiation are not authorized.

b. Charges are to be primed for initiation on site with the minimum number of personnel required to accomplish the task in order to minimize personnel exposure.

c. Explosives are not to be thrown or mishandled in any manner.

d. Demolition exercises will cease during all electrical storms, sandstorms, or snowstorms which may produce atmospheric static electricity or limit the line of sight to the demolition site.

e. Barriers will be erected during demolition operations to prevent unauthorized entry to the demolition site. Barriers are located within the ammunition points on ranges 53 and 55.

f. A safety observer will remain in the bunkers during all operations in order to report any mishaps to the Range Operations Firing Desk and provide first aid when necessary.

g. Communication requirements for all detonations are:

- (1) Contact the Range Operations Firing Desk five (5) minutes prior to detonation time to request permission to initiate.
- (2) Contact the Range Operations Firing Desk immediately after detonation to report successful detonation.
- (3) Repeat the communication process for each detonation.
- (4) If the Range Operations Firing Desk does not hear from the range within five (5) minutes of the proposed detonation time, a range representative will be sent to investigate.

#### **5-24. Chemical Agent CS/Smoke Operations and Pyrotechnics**

- a. Chemical agent CS, smoke operations, and pyrotechnics may be used to reinforce training with prior approval from Range Operations. The items must be listed in the RFMSS request in the ammunition section and an overlay of the proposed area of use attached in PDF format in the documents section of RFMSS.
- b. CS and smoke will not be employed:
  - (1) Within 500 meters of:
    - (a) Cantonment fence (except in the gas chamber Building 8765)
    - (b) Mid-State Prison on Range Road
  - (2) Within 200 meters of:
    - (a) Any hard surface road
    - (b) Units not participating in the exercise
  - (3) Anywhere on cantonment area
  - (4) Inside any building other than the gas chamber Building 8765
- c. When CS or smoke is used on trails or unsurfaced road networks, road guards will be posted at 200 meters from the site to prevent vehicles not in the exercise from wandering into the area.
- d. Weather and other safety factors such as fire conditions, location, and wind direction must be considered before employing CS, smoke, and pyrotechnics.
- e. CS employment:
  - (1) Only CS capsules and powder are authorized for use in the CS chamber.
  - (2) CS and smoke grenades will not be used in confined spaces due to oxygen depleting effects.
- f. Aerial flares are not authorized in the following TAC areas or subdivisions of the training sites located within the flight approach routes to the JB MDL airfield: 1, 2, 3, 4, 5, and 7.
- g. Smoke employment:
  - (1) Smoke is not allowed in the gas chamber Building 8765, structures, or tunnel complexes.
  - (2) Smoke may only be used after receipt of an approved overlay.
  - (3) All personnel will wear a protective mask:
    - (a) Before and during any exposure to a concentration of smoke produced by M8 white smoke grenade or smoke pots (HC) or metal powder obscurant.
    - (b) When passing through or operating in dense smoke (visibility less than 50 meters).
    - (c) When operating in or passing through a smoke haze (visibility less than 50 meters) and the duration of exposure will exceed four (4) hours.

(d) Anytime exposure to smoke produces breathing difficulty, irritation, or discomfort. Such effects in one individual will serve as a signal for all similarly exposed personnel to mask.

(e) When using a smoke generator and it is impossible to stay upwind.

(4) HC Smoke Pots:

(a) HC smoke pots exposed to water will not be used.

(b) HC smoke pots will not be used inside buildings, tents, or any other confined space.

(5) When employing smoke grenades or smoke pots, the firer must keep their face averted during activation to prevent burns. Grenades will be thrown a minimum of ten (10) meters from any personnel and all personnel will remain thirty meters from smoke pots.

(6) Red smoke is traditionally recognized as an emergency signal; therefore, the following guidelines must be adhered to:

(a) Requisition all other colors for use than red smoke when possible.

(b) If red smoke is issued for use, ensure the Range Operations Firing Desk understands you will be using red smoke during the training event so that the tower at JB MDL/Lakehurst can be notified of the training event.

h. Trip flares and booby trap emplacement:

(1) The area will be cleared of flammable material for a minimum of 15-meter circumference.

(2) Trip flares should be fenced or guarded to prevent people from approaching within two (2) meters.

(3) No commercial devices are authorized to be used during any training event.

(4) All trip flares and booby traps will be removed prior to requesting an inspector.

i. Grenade and Artillery simulators:

(1) Must be thrown immediately after ignition.

(2) Personnel will wear leather gloves.

(3) Any device failing to detonate after being thrown will be treated as a UXO and the Range Operations Firing Desk contacted (609)562-4600 for EOD support.

(4) Do not throw a simulator within 30 meters of personnel not wearing protective equipment.

(5) The use of pyrotechnic pits will be used during training scenarios requiring the use of pyrotechnics within proximity of personnel, 30 meters, to contain secondary fragmentation.

## **5-25. Water and Water Crossing Operations**

a. The only approved sites for water operations and crossings are Amphibious Lake in TAC 3B, Hanover Lake in TAC 6D, and Brindle Lake in TAC 8B.

b. The use of approved personal flotation devices will be used by all participants.

c. A diver or certified lifeguard will be present during all training.

d. When crossing a wide area, a boat with safety personnel, a life buoy, and line will be in the water.

#### **5-26. Foot Marches**

a. Units can conduct foot marches through the TAC areas vast road networks, but units will treat any hard surface road as a hazard area to be crossed but not travelled on. Range Road, Browns Mills/Cooks Town Road, Cooks Corner Road, Hockamick Road, and The Grand Concourse are heavily traveled roads and many are shared with the state and county.

b. A USASAFD Form 2070, Ruck March Request, will be completed and a strip map of the proposed route submitted to the Safety Office for approval. Attach the document, in PDF format, to the RFMSS request.

c. Units will maintain communication with the Range Operations Firing Desk via Motorola radio and call in the following:

- (1) Crossing start point with number of participants.
- (2) Enroute, should they need medical evacuation.
- (3) Crossing release point when all participants have completed.

#### **5-27. Bulk Fuel Operations**

a. Authorized within the TAC areas with an approved overlay submitted in the RFMSS request.

b. Spill containment measures will be used to the maximum extent possible. It's the unit's responsibility to provide spill kits in the event of a release and to begin mitigation measures along with clean-up as soon as possible.

c. In the event of a spill, the unit will not clear the installation until arrangements are made to clean-up the spill. Units responsible for the spills may be charged clean-up costs if JB MDL is required to perform the clean-up operations.

## **Appendix A**

### **References**

#### **Section I**

##### **Required Publications**

**AR 75-1** - Malfunctions Involving Ammunition and Explosives, 9 FEB 2017  
**AR 190-11** - Physical Security of Arms, Ammunition and Explosives, 17 JAN 2019  
**AR 190-13** - Army Physical Security Program, 27 JUN 2019  
**AR 190-14** - Carrying of Firearms and Use of Force for Law Enforcement and Security Duties, 12 MAR 1993  
**AR 385-10** - The Army Safety Program, 24 FEB 2017  
**AR 385-63** - Range Safety {MCO 3570.1C}, 30 JAN 2012  
**AR 600-55** - The Army Driver and Operator Standardization Program (Selection, Training, Testing and Licensing), 17 SEP 2019  
**AR 710-2** - Supply Policy below the National Level, 28 MAR 2008  
**AR 725-50** - Requisitioning, Receipt and Issue System, 15 NOV 1995  
**AR 735-5** - Property Accountability Policies, 9 NOV 2016  
**DA Pam 385-40** - Army Accident Investigations and Reporting, 18 MAR 2015  
**DA Pam 385-63** - Range Safety, 16 APR 2014  
**DA Pam 385-64** - Ammunition and Explosive Safety Standards, 24 MAY 2011  
**ATP 5-19** - Risk Management, 9 NOV 2021  
**FORSCOM Regulation 55-1** - Unit Movement Planning, 1 OCT 1995  
**Range Map** - Army Support Activity Fort Dix, Joint Base McGuire-Dix-Lakehurst Edition 2-SRP, Series V722S, Sheet FORTDIXMIM  
**USASA Fort Dix Reg 95-1** - Aviation Flight Regulations, 30 JUN 2022  
**USASA Fort Dix Reg 350-3** - Training Policies and Procedures, 18 JAN 2022  
**USASA Fort Dix Reimbursement Policy**, 1 MAY 2022

#### **Section II**

##### **Related Publications**

**AR 135-200** - Active Duty for Missions, Projects and Training for Reserve Component Soldiers, 20 OCT 2020  
**AR 75-15** - Policy for Explosive Ordnance Disposal, 17 DEC 2019  
**AR 95-1** - Flight Regulations, 22 MAR 2018  
**AR 190-5** - Motor Vehicle Traffic Supervision, 22 MAY 2006  
**AR 200-1** - Environmental Protection Enhancement, 13 DEC 2007  
**AR 350-1** - Army Training and Leader Development, 10 DEC 2017  
**AR 350-19** - The Army Sustainable Range Program, 30 AUG 2005  
**AR 700-68** - Storage and Handling of Liquefied and Gaseous Compressed Gasses and Their Full and Empty Cylinders {DLAR (JS) 4145.25/AR 700-68/NAVSUPINST 4440.128/MCO 10330.D}, 17 JUL 2018  
**DA Pamphlet 350-38** - Standards in Weapons Training, 30 SEP 2021  
**DA Pamphlet 710-2-1** - Using Unit Supply System (Manual Procedures), 1 DEC 2016  
**FM 3-04** - Army Aviation, 6 APR 2020

**FM 3-22.3** - Stryker Gunnery, 9 MAR 2006  
**ATP 3-06** - Urban Operations, 7 DEC 2017  
**ATP 3-21.18** - Foot Marches, 13 APR 2022  
**ATP 3-50.21** - Survival, 18 SEP 2018  
**TB 9-1300-385** - Munitions Restricted or Suspended  
**TB MED 524** - Occupational and Environmental Health: Control of Hazards to Health from Laser Radiation  
**TC 3-09.8** - Fire Support and Field Artillery Certification and Qualification, 30 MAR 2020  
**TC 3-09-81** - Field Artillery Manual Cannon Gunnery, 13 APR 2016  
**TC 3-20.40** - Training and Qualification - Individual Weapons, 30 JUL 2019  
**TC 3-22.19** - Grenade Machinegun Mk 19 MOD 3, 10 MAY 2017  
**TC 3-22-23** - M18A1 Claymore Munition, 15 NOV 2013  
**TC 3-22.37** - Javelin-Close Combat Missile System, Medium, 13 AUG 2013  
**TC 3-22.50** - Heavy Machine Gun M2 Series, 19 MAY 2017  
**TC 3-22.90** - Mortars, 17 MAR 2017  
**TC 3-22.91** - Mortar Fire Direction Procedures, 15 MAY 2017  
**TC 3-22.240** - Medium Machine Gun, 28 APR 2017  
**TC 3-22.249** - Light Machine Gun M249 Series, 16 MAY 2017  
**TC 3-23.30** - Grenades and Pyrotechnic Signals, 17 AUG 2021  
**TC 3-23.35** - Pistol, 30 MAY 2017  
**TC 3-25.26** - Map Reading and Land Navigation, 15 NOV 2013  
**TC 3-25-150** - Combatives, 31 MAR 2017  
**TC 4-02.1** - First Aid, 21 JAN 2016  
**TC 4-02.3** - Field Hygiene and Sanitation, 6 MAY 2015  
**TC 90-1** - Training for Urban Operations, 19 MAY 2008  
**TM 3-22.31** - 40 MM Grenade Launchers, 17 NOV 2010  
**TM 43-0001-28** - Army Ammunition Data Sheets for Artillery Ammunition, 28 APR 1994  
**TM 43-0001-28-3** - Data Sheets for Guns, Howitzers and Mortars Interoperable Ammunition, 29 SEP 1986  
**MCRP 8-10 B.2** - Rifle Marksmanship  
**MCO 3574-2L** - Marine Corps Combat Marksmanship Program  
**OPNAVINST 3591.1G** - Small Arms Training and Qualification

### **Section III** **Prescribed Forms**

**DA Form 285** - US Army Accident Report  
**DA Form 581** - Request for Issue and Turn-In of Ammunition  
**DA Form 2028** - Recommended Changes to Publication and Blank Forms  
**DA Form 2062** - Hand Receipt / Annex Number  
**DA Form 2173** - Statement of Medical Examination and Duty Status  
**DA Form 2404** - Equipment Inspection and Maintenance Worksheet  
**DA Form 2407** - Maintenance Request  
**DA Form 2765-1** - Request for Issue or Turn-In  
**DA Form 3161** - Request for Issue or Turn-In

**DA Form 4691** - Initial Application for Clinical Privileges and Staff Appointments (Medical)

**DA Form 4691-1** - Application for Renewal of Clinical Privileges and Staff Appointments

**DA Form 5440-XX** - Delineation of Clinical Privileges (By Specialty) (Medical)

**DA Form 5754** - Malpractice History and Clinical Privileges Questionnaire

**DD Form 2A (ACT)** - Active Duty Military Identification Card

**DD Form 2A (RET)** - Armed Forces Identification Card (Reserve)

**DD Form 175** - Military Flight Plans

**DD Form 175-1** - Flight Weather Briefing

**DD Form 448** - Military Interdepartmental Purchase Request

**DD Form 577** - Appointment/Termination Record - Authorized Signature

**DD Form 626** - Motor Vehicle Inspection (Transporting Hazardous Materials)

**DD Form 1131** - Cash Collection Voucher

**DD Form 2977** - Risk Assessment Worksheet

**SF 91** - Motor Vehicle Accident Report

**USASA Fort Dix Form 2070** - JB McGuire/Dix/Lakehurst New Jersey Road March Strip Map

**USASA Fort Dix Form 2226-R** - Inspection Checklist for Range Inspectors and Training Units

**USASA Fort Dix Form 2227-R** - Inspection Checklist for Bivouac Inspectors and Training Units

**USASA Fort Dix Form 2228-R** - Inspection Checklist for Training Area Inspectors and Training Units

**USASA Fort Dix Form 2229-R** - Inspection Checklist for Shoot-House

**USASA Fort Dix Form 2230-R** - Inspection Checklist for Collective Training Facility

**USASA Fort Dix Form 2251-R** - Rappel Master Certification Statement

**USASA Fort Dix Form 2252-R** - Rappel Tower Safety Checklist

**USASA Fort Dix Form 2254-R** - Artillery Safety Fan

**USASA Fort Dix Form 2255-R** - Mortar Safety Fan

**USASA Fort Dix Form 2256-R** - Mortar/Artillery Safety Checklist

**USASA Fort Dix Form 2258-R** - CS Chamber Qualification Statement

**USASA Fort Dix Form 2259-R** - CS Chamber Safety Checklist

## Appendix B

### Range Standards (Checklists)

The following tables set forth the various requirements, standards, checklists and briefings for conducting live fire training at USASA Fort Dix.

Table B-1. Range Officer-In-Charge (OIC) and Range Safety Officer (RSO) Requirements (See also Table 1-1, DA Pam 385-63)		
TYPE OF RANGE/ACTIVITY	OIC *1	RSO *1
Small arms Machineguns	E-6 or Higher *11	E-5 or Higher *12
Practice hand and rifle grenades	E-6 or Higher *11	E-5 or Higher *7*9*12
Sub-caliber training devices	E-6 or Higher *11	E-5 or Higher *12
Laser Devices	E-6 or Higher *2*11	E-5 or Higher *2*12
Firing Devices, Trip Flares and Simulators	E-6 or Higher *11	E-5 or Higher *12
Chemical Agents and Smoke	E-6 or Higher *3*11	E-5 or Higher *3*4*9*12
Aerial Gunnery and Air Defense Weapons	E-7 or Higher	E-6 or Higher
Flamethrowers	E-7 or Higher	E-6 or Higher
Live Hand and Rifle Grenades	E-7 or Higher	E-6 or Higher
Grenade Launcher and Grenade Machinegun	E-7 or Higher	E-6 or Higher
Live Mines and Demolitions	E-7 or Higher	E-6 or Higher
Tank and Fighting Vehicle Canons	E-7 or Higher	E-6 or Higher
Recoilless Rifles	E-7 or Higher	E-6 or Higher
ADA Rockets and Guided Missiles	WO1 or Higher	WO1 or Higher
Direct Fire Anti-Tank Rockets and Missiles	E-7 or Higher	E-6 or Higher
Mortar	E-6 or Higher *6	E-6 or Higher *10
Field Artillery	E-7 or Higher *5*6	E-6 or Higher *5
Live-Fire Exercises using Organic Weapons, Squad through Company, Battery and Troop	E-7 or Higher	E-6 or Higher
Combined Arms Live Fire Exercises Using Outside Fire Support, Troop, Battery, Squad, Platoon, Company; or Battalion or Larger	E-7 or Higher *8	E-6 or Higher *8
NOTES		
1. OIC and RSO must be at least 18 years of age. Civilians GS-07 or above may be OIC and GS-05 or above may be RSO; Contractors may be RSO when approved by USASA Commander and IAW statement of work. There must be at least one Assistant Safety Officer for every four lanes of firers on zero and qualification ranges and one for every two lanes during night fire.		
2. Must be laser qualified.		
3. OIC and RSO must be NBC qualified when conducting NBC or Smoke Training.		
4. If used the Safety Officers must be NBC qualified.		
5. Use of E-7s as OICs is authorized only when approved by the USASA Commander. Duty as RSO is normally performed by either the Battery Executive Officer or the Platoon Leader.		
6. The Indirect Fire Commander is responsible for safety during all phases of a firing exercise under his control. The Commander will determine, select, train and safety certifies the personnel necessary to assist him in discharging this responsibility.		



7. If practice fuses are used a safety officer is required. In the event that any MTOE / TOE / TDA position is not filled by a command safety certified individual then another individual command safety certified and qualified for that position may perform the safety checks.
8. For Battalion or larger exercises, OIC will be a Field Grade Officer.
9. RSO for Marine Corps will be E-6 or above for practice hand grenades, chemical agents and smokes. USASA Commander may allow E-5 to act as RSO.
10. RSO for Marine Corps can be an E-5 for mortar training activities.
11. USAF E-5 with CATM School certification may perform duties equivalent of an E-6. School certification must be provided to Range Control.
12. USAF E-4 with CATM School certification may perform duties equivalent of an E-5. School certification must be provided to Range Control.

Table B-2. Range Personnel and Duties

In order to provide for safe and efficient range operations and effective instruction, this is an example of how to organize personnel to carry out required range functions and duties	
OIC (Rank IAW Table B-1)	Responsible for overall operations before, during and after live fire training
RSO (Rank IAW Table B-1)	Responsible for the safe operation of the range to include conducting a safety briefing before firing begins. Ensures that a brass and ammunition check is made prior to personnel departing the range. Ensures that all personnel comply with safety regulations and procedures prescribed on a live fire range. RSO will not be assigned any other duties.
NCOIC	Supervise enlisted personnel supporting the live fire exercise. Assists the OIC and RSO in other functions as required.
Ammunition Detail	Composed of one or more ammunition handlers with responsibility to break down, issue, receive, account for and safeguard ammunition. Collects ammunition residue for Turn-in.
Unit Armor	Repairs the weapons as required.
Tower Operator	Raises and lowers targets, times exposures and gives fire commands.
Assistant Safety Officer	At least one assistant safety officer is assigned for each four firing points during day fire and one to every two points for night fire. Ensures that firers obey all firing commands and observe safety regulations; assist firers experiencing difficulty. No rank restriction however must be knowledgeable with all weapon safety and firing restrictions.
Medic/Combat Lifesaver	Provide medical support to unit; stabilize patient until arrival of range control ambulance support personnel.
NOTE: Reserve Officer Training Corps (ROTC) units must have at least one Cadre member in charge of the range ammunition point and a minimum of two Cadre personnel on all training areas. ROTC Cadets may not serve as OIC or RSO.	

Table B-3. Range Operations Checklist	
Mission Analysis	
	Who will be firing on the range? Number of Personnel? Units?
	What weapons and course will be fired?
	Where will the training be conducted?
	When is the range scheduled for operations?
Double Check	
	Has sufficient ammunition been requested for the number of personnel?
	Are range facilities adequate for the type of training to be conducted?
	Has enough time been scheduled to complete the training?
	Have conflicts that surfaced been resolved?
Become an Expert	
	Review the TMs and FMs for the weapons to be fired.
	Talk with armorers and other personnel experienced with the weapons to be fired.
	Review AR 385-63, Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat.
	Visit Range Control and read installation range instructions.
	Obtain Range Safety Certification.
	Conduct Leader Recon of your training facilities.
	Check to see if training tasks can be incorporated into the range training plan.
Determine Personnel Requirements	
	OIC: Requires current USASAFD Range Safety Certification
	RSO: Requires current USASAFD Range Safety Certification
	Assistant Safety Officers (Determined by number of Firing Lanes for Weapon System)
	NCOIC
	Ammunition NCO. Note: ROTC units must have 1 Cadre in Charge
	Ammunition Personnel (Determined by Type of Range).
	Target Detail
	Tower Operator(s) Note: Range Control will provide training to unit designated operators
	Concurrent training instructors
	Assistant Instructors
	Radio Telephone Operator
	Guards (Per Ammunition Category Requirements)
	Medic / Combat Lifesaver
	Air Guard
	Armor
	Vehicle Operators (Range Personnel and Equipment)
	Mechanic
	Have you overstaffed your range?
Determine Equipment Requirements	
	Range Control Issued Items signed for?
	Safety Fan and Diagram on hand and turned in to Range Control, if required.
	Other applicable safety equipment i.e., (aiming circle, compass) on hand

	Appropriate publications pertaining to the training that will be conducted on hand
	Lesson plans on hand
Determine Equipment Requirements	
	Communications - Telephone, Radios, PA System, Bullhorn
	Training aids for concurrent training
	Safety Paddles and Brass Rod (for clearing weapons)
	Targets (Picked Up at Range Control Target Shop)
	Flashlights with safety lights for night operations
	Earplugs
	Water for Drinking and Cleaning
	Scorecards
	Armors Tool Kit
	Brooms, shovels and other cleaning supplies and equipment
	Tables and Chairs (as needed)
	Tents (Warming and Ammunition Storage as required)
	Fire Extinguisher (Minimum 2 for Ammunition Point)
	Target Accessories - Staple Gun, Staples and Tape
	Tarp, pallets and ropes for ammunition storage
	Spare weapons and repair parts as needed
	Toilet Paper
	Tow Bar and Slave Cable
Determine Available Resources	
	Fill Personnel Spaces
	Keep Unit Integrity
	Utilize Your Assets (NCOs)
Coordination with Supporting Organizations	
	Ammunition
	Transportation
	Training Aids
	Medics
	Weapons
	Other Equipment
Fool Proofing	
	Write an overall Lesson Plan for the Range
	Rehearse concurrent training instructors and assistants
	Brief Radio/Telephone Operator on Procedures
	Collect Equipment for use on Range
	Obtain Training Aids
Occupying the Range and Conducting Training	
	Request Permission to Occupy the Range from Range Control (609-562-4650) as soon as you arrive on site.
	Establish two (2) means of Communication
	Designate Specific Areas: ____ Ammunition Point

	<input type="checkbox"/> Medical Station <input type="checkbox"/> Water Point <input type="checkbox"/> Concurrent Training Site <input type="checkbox"/> Mess Area
	Raise Range flag when occupying and inspect range for operational condition.
	Check ammunition to ensure it is the right type and quantity
	Ensure range cadre are in proper uniform and equipment is in position
	Receive training personnel
	Conduct Safety Briefing, at a minimum: <input type="checkbox"/> Communications <input type="checkbox"/> Medical Support / Procedures <input type="checkbox"/> Troop Limits <input type="checkbox"/> Commanders Risk Assessment <input type="checkbox"/> Hearing Protection <input type="checkbox"/> Weapon / Ammunition Malfunctions <input type="checkbox"/> Range Limits <input type="checkbox"/> Control Measures <input type="checkbox"/> UXOs <input type="checkbox"/> Cease Fire Signals
	Organize Personnel into Firing Orders
	Request Wet Time from Range Control
Conduct of Firing	
	Maintain communications with range control (hourly radio check)
	Commands from tower clear and concise
	Range Area Policed
	Ammunition accountability maintained
	Personnel accountability maintained
	Vehicles Combat Parked (backed into parking spaces)
	Air Guard on Duty and Alert
	Personnel in Proper Uniform
	Earplugs in Use
	Personnel responding properly to all commands
	On-the-Spot corrections made when personnel use bad techniques or fail to hit targets
	Conservation of ammunition enforced
	Weapons cleared properly prior to leaving the firing line
	Personnel checked for brass and ammunition prior to leaving the range
Closing the Range	
	Request Dry Time from Range Control
	Report total number of rounds fired by DODIC
	Drag and police range (Complete inspection sheet from book).
	Contact range control and request a clearance inspection
	Return all equipment to target shop and firing desk to clear hand receipts.

Table B-4. Rifle Range Safety Briefing

	LIMITS: The two red and white candy-striped poles located on the far right and far left (point to them) are the range left and right limits. Never point or fire your rifles outside the limits of these poles.
	When entering onto the firing line the selector lever is on SAFE, the bolt is LOCKED to the rear and the dust cover is OPEN. (Demonstrate)

	Firers will always enter and exit the firing line at the base of the tower.
	Before occupying firing positions, inspect positions for harmful animals and insects.
	Firers will always point the muzzle of the rifle down range whenever on the firing line. The firing finger is not placed within the trigger housing area. (Demonstrate)
	Smoke only in designated smoking areas on the range.
	Tactical Park (Back In) all vehicles on the range, do not block any road.
	You will not eat or drink on the firing line unless the tower operator permits you to drink from your canteen.
	Never touch your weapon while personnel are downrange or in front of the firing points.
	Load your weapon only on the command from the tower.
	Never fire without your hearing protection in your ears.
	Before leaving the firing line all weapons will be rodde by the Safety Officer.
	Consider the weapon loaded at all times, never point the weapon at anyone.
	Anyone observing an unsafe act will immediately call CEASE-FIRE, on the command of cease-fire place your weapon on safe then place it in the V-notch stake, then give vocal alarm and visual signal for cease-fire.
	Once cleared off the firing line, firers will immediately report to the ammunition point and turn-in all ammunition and expended brass.
	No one will depart the range until they have been inspected for ammunition and brass.
	NOTE: When an electrical storm occurs the Safety Officer will direct the tower operator to prepare to disperse personnel. At that time the tower will give the command to lock and clear all weapons and ground all metal equipment. The tower operator will then direct personnel to a safe area.
	The units risk assessment should be incorporated into the safety briefing
	Are there any questions?

Instructions for conducting weapon zero and qualification are contained in specific weapon FMs, TCs, TMs, and service specific regulations. Personnel will refer to these documents for current standards and conduct their training accordingly.

## **Appendix C**

### **Range Usage and Planning Requirements**

#### **C-1. Training Strategy**

Units are required to conduct the staff analysis to determine the number and type of facilities required to meet training objectives in accordance with Department of the Army throughput standards (i.e., 15 firing orders per lane, per day on individual weapons ranges). Range Operations will only approve RFMSS requests that align to DA throughput standards.

#### **C-2. Individual Weapons Ranges**

Individual weapons ranges support the individual Soldier skills, marksmanship, and qualification for individual weapons, grenades, or demolitions. Ranges for zero and marksmanship training requires target holders, backing, and applicable target for weapon utilized. Pistols, shotguns, and non-standard carbine targets use 1x4s with silhouettes stapled. Automated Qualification Ranges are computer run utilizing the TRACR software; units will operate the targetry system after a course of instruction from Range Support personnel.

#### **C-3. Crew Served Weapons Ranges**

Crew Served Weapons Ranges support crews firing both direct and indirect weapons systems that are specific to a single crew function. These ranges are typically feeder ranges for collective tasks or events. These ranges enable live crew skills in preliminary, basic, and advanced gunnery to include crew qualification. These ranges may facilitate individual live fire tasks. Risk Assessments, Indirect Fire Safety data, and demolition plans are required to be turned in no later than (NLT) the Final Coordination Meeting held every Wednesday 10 days prior to training dates and attached as a PDF file to the RFMSS request. Automated Qualification Ranges are computer run utilizing TRACR software; units will operate the targeting system after a course of instruction from Range Support personnel.

#### **C-4. Collective Live Fire Ranges**

Collective Live Fire Ranges support multiple maneuver elements conducting combined arms live fire events including in urban environments. These ranges are primarily used for capstone events following a comprehensive gated live fire training strategy. Collective ranges may facilitate individual, crew, and urban tasks. Risk Assessments and CONOPs are required to be turned in NLT the Final Coordination Meeting held every Wednesday 10 days prior to training dates and attached as a PDF file to the RFMSS request. Automated Qualification Ranges are computer run utilizing TRACR software; units will operate the targetry system after a course of instruction from Range Support personnel.

**C-5. Non-Standard Training Events**

Any event with multiple elements conducting firing on the move or moving from firing point to firing point requires a CONOP. The CONOP should be attached to the RFMSS reservation NLT 30 days prior to the date of the collective live fire event. Units will be locked out of RFMSS 30 days prior to a collective live fire or non-standard training event if they have not submitted a CONOP to Range Operations.

## Appendix D

### Range / Facilities Matrix

The matrixes below provide a brief cross reference of information concerning training areas. The information in D-1 relates to the various training sites, while D-2 provides data based on weapon caliber keyed to the appropriate ranges.

**Table D-1. Facility / Range / Site Information**

<u>SITE</u>	<u>LOCATION</u>	<u>TYPE SITE</u>	<u>AMMUNITION</u>	<u># FIRING POINTS LANES</u>	<u>BLEACHER CLASSROOM CAPACITY</u>	<u>REMARKS</u>
<u>BIVOUAC SITES</u> - SEE TABLE E-1						
<u>COMMON TASK TRAINING SITE (CTT)</u>						
CTT	WK331264	WARRIOR	BLANKS,	N/A	CLASSROOMS	CONFLICTS
SITE		TASK TRAINING	PYRO		7 EA (200) BLEACHERS	N/A NO AERIAL FLARES
<u>CONTINGENCY OPERATING LOCATIONS</u>						
COL WK483247	COMMAND	BLANKS		N/A	CLASSROOM	
LIBERTY	POST OPS	PYRO			& OFFICE (250)	
COL WK487235	THEATER	BLANKS		N/A	N/A	PRIORITY
VICTORY	IMMERSION	PYRO WITH				EXERCISES
	TRAINING	RANGE SAFETY				
		APPROVAL				
<u>DRIVER TRAINING AREAS (DTA)</u>						
DTA 2	WK359285	DRIVER	N/A	30,000 SQ	N/A	CONFLICTS
		TRAINING		METER		TAC 5E
		AREA		ASPHALT PAD		
				(2) MOTOR POOLS		
DTA 3	WK355287	DRIVER	BLANKS	2 MILE	CLASSROOM	CONFLICTS
		TRAINING	PYRO	OFF ROAD	(50)	TAC 5E
		AREA		COURSE		
DTA 4	WK473299	DRIVER	BLANKS	3 MILE	N/A	CONFLICTS
		TRAINING	PYRO	OFF ROAD		TAC 9E
		AREA		COURSE		
DTA 5	WK474302	DRIVER	BLANKS	3 MILE	CLASSROOM	CONFLICTS
		TRAINING	PYRO	OFF ROAD	(50)	TAC 9D
		AREA		COURSE		
<u>ENGINEER TRAINING AREAS</u>						
ENGR WK493260	HEAVY	BLANKS		TOWER &	N/A	CONFLICTS
HV EQ	EQUIPMENT	PYTO		SHELTERED		TAC 12A
	TRAINING			PARKING		



EXPLOSIVE ORDNANCE DISPOSAL

EOD	WK478270	EMERGENCY ORDNANCE DISPOSAL	AS REQUIRED	OBSERVATION BUNKERS	N/A	CONFLICTS RG 40 COORD 87 EOD
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GAS CHAMBER

HF 11	WK351274	CS CHAMBER	CS PELLETS & POWDER	CS CHAMBER	BLEACHER CLASSROOMS (200 EA)	REQUIRES SCHOOL TRN NBC OFF/NCO
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IMPROVISED EXPLOSIVE DEVICE TRAINING

HOME STATION TRAINING LANE (HSTL - EAST)	WK458324	IED DEFEAT TRAINING	BLANKS PYRO SIMUNITIONS	MULTIPLE STRUCTURES ROAD NETWORK	N/A	CONFLICTS TAC 9D, RG86
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HOME STATION TRAINING LANE (HSTL - WEST)	WK330254	IED DEFEAT TRAINING	BLANKS PYRO SIMUNITIONS	MULTIPLE STRUCTURES ROAD NETWORK	CLASSROOM (150)	PRIMARY USAF AEC
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INTERNMENT RESETTLEMENT (IR) CAMP

IR SITE (TAC 3C)	WK342260	ENEMY PRISONER OF WAR	BLANKS & PYRO	POW COMPOUND	N/A	NO AERIAL FLARES
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IR SITE (TAC 12C)	WK504208	ENEMY PRISONER OF WAR	BLANKS & PYRO	POW COMPOUND	N/A	NO AERIAL FLARES
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LAND NAVIGATION

LN 2 (TAC 1F)	WK298279	INTERMEDIATE DAY / ADVANCED NIGHT LAND NAVIGATION	N/A	12 START POINTS 2 LANES EACH	CLASSROOM (50)	
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LN 3 (TAC 3A)	WK332262	BEGINNER / INTERMEDIATE ADVANCED NIGHT LAND NAVIGATION	N/A	4 START POINTS 3 LANES EACH	N/A	
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LN 4 (TAC 3B)	WK343271	INTERMEDIATE DAY / ADVANCED NIGHT LAND NAVIGATION	N/A	9 START POINTS	N/A	
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LEADERSHIP REACTION COURSE

LRC	WK331273	LEADERSHIP SKILLS TRNG	N/A	15 STATIONS	N/A	
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LITTER OBSTACLE COURSE

LITTER OBS CRS	WK375282	MEDICAL AID TNG	BLANKS & PYRO	10 STATIONS	CLASSROOM (100)	CONFLICTS TAC 5C
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OBSTACLE COURSE

OBST	WK336268	PHYSICAL	N/A	17 OBSTACLES	N/A
CRSE		FITNESS			

RANGES

RG 3A	WK381295	HAND GREN ASSAULT COURSE	SMOKE, INERT PRACTICE HG BLANKS PYRO	6 BAYS	BLEACHER CLASSROOM (250)	CONFLICTS TAC 7C NO AERIAL FLARES
RG 3B	WK385294	LIVE GREN	FRAG CONCUSSION	6 BAYS	N/A	CONFLICTS RG 10
RG 4	WK383297	FORCE ON FORCE SHOOT HOUSE	Simunitions CCMCK Weapons	SHOOT HOUSE MOCK SHOOT HOUSE	CLASSROOM (50)	
RG 6A	WK387305	COMBAT PISTOL QUAL AUTOMATED	Standard Pistol SHOTGUN	(12) LANES	BLEACHER CLASSROOM (50) (200)	CONFLICTS NW TANK TRAIL
RG 6B	WK387304	PISTOL QUAL LEWTAQ AUTOMATED	Standard Pistol SHOTGUN	(15) CPQC (10) MPQC	BLEACHER CLASSROOM (50)	CONFLICTS NW TANK TRAIL
RG 7	WK386301	MULTI-  PURPOSE  25 METER	5.56, 7.62, .50  40mm HE 203/320  LAW SUB CAL AT-4 SUB CAL		BLEACHER  CLASSROOM (50)	HARD  TO 800  25 METER STAKE FRAME
RG 8	WK386300	100 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN		CLASSROOM (50)	
RG 9	WK385298	M203 QUAL	40mm TPT	2 LANES W/4 STATIONS	BLEACHER CLASSROOM (50)	
RG 10	WK381294	MG ZERO	5.56, 7.62, .50	8 LANES	BLEACHER	
RG 11	WK381290	MG ZERO & TRANSITION AUTOMATED	5.56, 7.62	8 LANES 4 ZERO LANES	BLEACHER CLASSROOM (200)	VEHICLE MOUNTS AUTHORIZED
RG 12	WK377289	MOUT	BLANKS & PYRO SIMUNITIONS	3 ONE STORY 7 TWO STORY 2 FAÇADE	CLASSROOM (50)	NO AERIAL FLARES
RG 13	WK381286	BASIC PISTOL & RIFLE		N/A	N/A	LEASED TO FBI
RG 14	WK388279	RECREATION	SMALL ARMS SHOTGUN, ARCHERY .50 MUZZLE LOAD	N/A	N/A	MWR

RG 15	WK388275	KNOWN DISTANCE & SNIPER	5.56, 7.62, .50		BLEACHER CLASSROOM (200)	NO MG FIRE
RG 16	WK390272	FIELD FIRE NIGHT FIRE AUTOMATED	5.56, 7.62	16 POINTS	BLEACHER CLASSROOM (50)	4 FIRING ORDERS PER HOUR
RG 17	WK390268	BASIC PISTOL & RIFLE		N/A	N/A	LEASED TO FBI
RG 18A	WK391266	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (200)	
RG 18B	WK391266	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM	
RG 19	WK394263	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (200)	NO NIGHT FIRE CEASE FIRE 1800-0730
RG 20	WK396263	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	NO NIGHT FIRE CEASE FIRE 1800-0730
RG 21	WK398263	SAW QUAL AUTOMATED	Standard Pistol 5.56, 7.62 SHOTGUN	8 POINTS	BLEACHER CLASSROOM (50)	NO NIGHT FIRE CEASE FIRE 1800-0730
RG 22	WK399262	100 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (200)	NO NIGHT FIRE CEASE FIRE 1800-0730
RG 23	WK401262	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	NO NIGHT FIRE CEASE FIRE 1800-0730
RG 24	WK403261	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (200)	NO NIGHT FIRE CEASE FIRE 1800-0730
RG 25	WK414259	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	COVERED FIRING LINE CLASSROOM (50)	PRIMARY 87 <sup>TH</sup> SFS

RG 26	WK415259	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	
RG 27A	WK417258	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	30 POINTS	BLEACHER CLASSROOM (200)	
RG 27B	WK418257	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	
RG 27C	WK419257	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	
RG 28A	WK420257	COMBAT PISTOL QUAL (RETS)	Standard Pistol	12 POINTS	BLEACHER CLASSROOM (50)	
RG 28B	WK421257	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	
RG 29A	WK424257	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (50)	
RG 29B	WK425257	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	32 POINTS	BLEACHER CLASSROOM (200)	
RG 30A	WK427256	150 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	N/A	CLASSROOM (50)	
RG 30B	WK431254	FIRE AND MANEUVER	5.56 BALL PRACTICE HG	4 LANES	BLEACHER CLASSROOM (50)	
RG 31	WK443254	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	13 POINTS	CLASSROOM (50) COVERED FIRING LINE	
RG 32	WK445254	FIELD FIRE NIGHT FIRE AUTOMATED	5.56, 7.62	16 POINTS	BLEACHER CLASSROOM (50)	
RG 33	WK447255	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	(13) 25 METER	CLASSROOM (50) COVERED FIRING LINE	
RG 34	WK450255	RIFLE QUAL AUTOMATED	5.56	16 POINTS	BLEACHER CLASSROOM (200)	4 FIRING ORDERS PER HOUR

RG 35	WK455255	RIFLE QUAL AUTOMATED	5.56	16 POINTS	BLEACHER CLASSROOM (200)	4 FIRING ORDERS PER HOUR
RG 37	WK458255	25 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62 SHOTGUN	5 POINTS	BLEACHER	
RG 38	WK460256	RIFLE QUAL AUTOMATED	5.56	16 POINTS	BLEACHER CLASSROOM (200)	4 FIRING ORDERS PER HOUR
RG 39A	WK471258	25 METER MULTI- PURPOSE MFP 2	Standard Pistol 5.56, 7.62 SHOTGUN 60mm, 81mm, 120 mm	20 POINTS	BLEACHER CLASSROOM (50)	CONFLICTS MFP #2
RG 39B	WK472262	MFP 4	60mm, 81mm 120mm	N/A	BLEACHER CLASSROOM (50)	CONFLICTS RANGE 40
RG 40	WK487262	MULT-PURP MACH-GUN QUAL	5.56, 7.62, .50 40mm (TPT Only)	(4) LANES	BLEACHER CLASSROOM (200)	CONFLICTS RG 39B EOD RG
RG 47A	WK483278	MG ZERO SAW QUAL 25 METER MULTI-PURPOSE MFP 5	5.56, 7.62, .50	(8) 10 METER (4) MG SAW	BLEACHER CLASSROOM (50)	CONFLICTS RG 47B, MFP 5 .50 SNIPER (ONLY)
RG 47B	WK482281	MG QUAL MG ZERO KNOWN DIST	5.56, 7.62	4 POINTS	BLEACHER CLASSROOM (50)	CONFLICTS RG 47A, RG 53
RG 53	WK481284	DEMOLITION TRAINIING	DEMOLITION MATERIAL ELEC & NON-ELEC INITIATION	N/A	CLASSROOM (50) OBSERVATION BUNKERS (2)	CONFLICTS RG 47B, RG 55 POST ROAD GUARDS
RG 55	WK481286	DEMOLITION TRAINIING	DEMOLITION MATERIAL ELEC & NON-ELEC INITIATION	N/A	OBSERVATION BUNKERS (2)	CONFLICTS RG 53, MFP 6 POST ROAD GUARDS
<u>RANGE 59 COMPLEX</u>						
RG 59A	WK464283	LIVE FIRE SHOOT HOUSE	Standard Pistol 5.56mm SHOTGUN	LIVE FIRE SHOOT HOUSE 25 METER RANGE (10) POSITIONS	CLASSROOM (50) AAR THEATER	CONFLICTS SEE TABLE E-80 FOR PRE-TNG REQUIREMENT
RG 59B	WK466291	COMMAND POST	BLANKS PYRO & SIMUNITIONS	TRAINING AREA	BLEACHER CLASSROOM (50) (200)	

RG 59C WK463292	MULTI PURPOSE  ARTILLERY MORTAR	Standard Pistol 5.56, 7.62, .50 cal 40mm, SHOTGUN MORTAR 60mm, 81mm ARTILLERY 105mm, 155mm CLAYMORE AT-4, SMAW, LAW GUIDED MISSILES TOW & JAVELIN	HARD TGTS OUT TO 2000 METERS	BLEACHERS CLASSROOM (200) (50)	DIRECT LAY  DIRECT LAY
RG 59D WK462296	10 METER MG ZERO MFP 3	5.56, 7.62, .50 cal SHOTGUN 60mm, 81mm	10 POINTS	N/A	
RG 59E WK469287	COLLECTIVE TRAINING FACILITY	BLANKS PYRO SIMUNITIONS TUNNEL SYSTEM	9 BLDGS	CLASSROOM (50) AAR FAC (88)	CONFLICTS LZ 59E SEE TABLE E-84 FOR PRE TRNG REQ
RG 59F WK464288	URBAN ASSAULT COURSE	5.56mm, 40mm TPT ON STATION 3 ONLY STATIONS 1,2,4,5 BLANKS / PYRO / SIMUNITIONS 60mm, 81mm	(1) TEAM CLEAR (2) PLT CLEAR (3) GRENADIER (4) TUNNEL (5) O/D BUILDING	1 OPNS BLDG	CONFLICTS MFP 6 RG 59A
RG 61 WK466303	ISBC & MULTI- PURPOSE	5.56, 7.62, .50 40mm TP Pyro M34 & M35, SIMULATORS	2 ISBC LANES 1 GUNNERY	BLEACHER CLASSROOM (200)	CONFLICTS DOWN RANGE ON RANGES 59C, 59D, 63, 65, 85 MFP 7 & 10 MAIN IMPACT
RG 63 WK465304	50 METER MULTI- PURPOSE	Standard Pistol 5.56, 7.62, .50 cal SHOTGUN	20 POINTS	N/A	RANGE 61, 65
RG 65 WK466303	CREW GUNNERY	5.56, 7.62, .50 40mm TP 20mm TP TOW INERT	1 COURSE ROAD & 4 BATTLE POS	BLEACHER CLASSROOM (200)	CONFLICTS RANGES 61, 63 & 85 MAIN IMPACT AIR GUNNERY MFP 7 & 10
RG 71 WK462314	25 METER MULTI- PURPOSE & MFP 7	Standard Pistol 5.56, 7.62 SHOTGUN 60mm, 81mm, 120 mm		BLEACHER CLASSROOM (50)	CONFLICTS RG 65

RG 75	WK461319	MFP 10	N/A	N/A	BLEACHER CLASSROOM (50)	
RG 85	WK456324	CREW GUNNERY AERIAL GUNNERY	.38, .308, .45 .357, 9mm, 10mm 5.56, 7.62, .50 40mm TP, 20mm TP, 105mm TP TOW INERT; AT-4, LAW SUB CAL	2 COURSE ROADS& HELI-PAD	BLEACHER CLASSROOM	CONFLICTS BUCKSWAMP ROAD AIR GUNNERY CONVOY RG
RG 86	WK458324	MOUT	BLANKS PYRO SIMUNITION	ROAD NETWORK 4 VILLAGES	CLASSROOM (200)	
<u>RAPPEL TOWER</u>						
RAP TOW	WK332270	RAPPELLING	N/A	TOWER	N/A	REQUIRES RAPPEL MASTER

TACTICAL (TAC) TRAINING AREAS - SEE TABLE E - 94

VEHICLE WASH RACKS

SMALL WK353276	VEHICLE WASHING	N/A	N/A
LARGE WK35424	VEHICLE WASHING	N/A	N/A

**Table D-2. Range / Facility Information by Caliber**

.38 Cal

Ranges 6A, 6B, 7, 8, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59C, 59D, 61, 63, 65, 85

.308 Cal

Ranges 6A, 6B, 7, 8, 13, 14, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59C, 59D, 61, 63, 65, 85

.357 Cal

Ranges 6A, 6B, 7, 8, 13, 14, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59C, 59D, 61, 63, 65, 85

.45 Cal

Ranges 6A, 6B, 7, 8, 13, 14, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59C, 59D, 61, 63, 65, 85

9 MM

Ranges 6A, 6B, 7, 8, 13, 14, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59A, 59C, 59D, 61, 63, 65, 85

10 MM

Ranges 6A, 6B, 7, 8, 13, 14, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59C, 59D, 61, 63, 65, 85

#### 5.56 MM

Ranges 7, 8, 13, 14, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59A, 59C, 59D, 61, 63, 65, 85

#### 5.56 & 7.62 (M249 & M240)

Ranges 7, 8, 10, 11, 30A, 30B, 32, 33, 47A, 47B, 59C, 59D, 61, 63, 65, 85, Convoy Live Fire

#### .50 CAL (M2)

Ranges 7, 40, 59C, 61, 65, 85

#### .50 CAL (SNIPER)

Ranges 7, 40, 47A, 59C, 59D, 61, 65, 85

#### SHOTGUN

Ranges 6A, 6B, 7, 8, 18A, 18B, 19, 20, 21, 22, 23, 24, 25, 26, 27A, 27B, 27C, 28A, 28B, 29A, 29B, 30A, 30B, 31, 33, 37, 39A, 47A, 47B, 59C, 59D

#### SUB-MACHINEGUN 9 MM & .45 CAL

Ranges 8, 27A, 27B, 27C, 28B, 29A, 29B, 30A, 31, 33, 37, 59C, 65

#### 40 MM (GRENADE LAUNCHER)

M203 - Ranges 9, 61 (TP Only), 7, 59C (TP and HE)

MK 19 - Ranges 40, 85 (TP Only), 59C (TP and HE)

#### DEMOLITIONS

Ranges 1 (Lane1), 53, 55, EOD (After Coordination with 87 EOD Only)

#### CLAYMORE

Range 59C

#### ANTI - TANK ROCKETS (LAW / SMAW / AT-4)

SUB CAL TNG Ranges 7, 59C

HEAT Range 59C

#### HAND GRENADE

Range 3A - PRACTICE

Range 3B - Fragmentation

Ranges 59C, 59D - CS Grenade (With Range Officer Approval)

#### ARTILLERY

Range 59C, AFPs 4, 6, 7, 8, 9, 13, 14, 17 (HE & ILLUM)

Range 1, 5, 15, 22, 24, 25 (RSOP ONLY)

#### MORTARS

60 MM HE - MFPs 3, 6, Range 59C and 59D

60MM ILLUM – MFPs 3, 6, Range 59C and 59D

81 MM MFPs 1, 2, 3, 4, 5, 6, 7, 9, 10, Range 59C and 59D

120 MM MFPs 1, 2, 4, 5, 7, 9, 10 and Range 59C

#### 20 MM -TP

Ranges 59C, 61, 65

#### 25MM TP

Range 59C, 61, 65, 85

#### ROCKETS SHOULDER LAUNCHED

Range 59C



2.75 IN ROCKETS - TP

Aerial Diving Fire w/Approved WDZ

2.75 IN ROCKETS - HE

Aerial Diving Fire w/Approved WDZ

TOW - GUIDED MISSILE (TP ONLY)

Ranges 59C, 61, 65, 85 (Wire Will Be Retrieved by Unit Prior to Clearance)

TOW & JAVELIN - GUIDED MISSILE (HE)

Range 59C

## **Appendix E**

### **Ranges, Training Areas and Facilities**

#### **E - 1. Ranges and Training Areas**

a. This appendix depicts tables alphanumerically for ease of use, with standardized information concerning each range and training facility. The information changes regularly as improvements are made and as the USASA Fort Dix training missions and situations change, and special requirements present themselves. Units must verify that facilities are configured adequately to meet their training needs.

b. Where appropriate figures present sketches of the ranges, due to space limitations the sketches are not to scale.

c. RFMSS training requests are not considered a reservation status until a member of the Training Coordination Staff reviews the request and approves the request which then moves it into a reserved status. All requests must be accurate, and all supporting documentation submitted prior to approval.

d. Many facilities serve multiple functions and some structures on a facility may not be assigned to the facility; the tables list everything assigned to the ranges and training areas.

e. All tactical training areas are considered co-use facilities and are scheduled to maximize the training capacity of the facility. Coordination between units during the RFMSS request process will facilitate the smooth execution of training. The first scheduled unit into a TAC area is considered the owner of the area and all follow-on units must submit a co-use agreement in RFMSS.

#### **E - 2. Other Training Areas**

Bivouac Areas and Tactical Training Areas have separate tables from ranges.

#### **E - 3. Special Training Areas**

Will list any specific requirements to operate those facilities.

Table E-1. Bivouac Sites

a. LOCATION: Bivouac area designation, type, location and distance from ASA Headquarters are indicated below, on MAP, 1:50,000, DIXJMTTC 001, June 2006

<u>SITE</u>	<u>COORDINATE</u>	<u>FIXED LATRINE</u>	<u>SHOWER</u>	<u>DISTANCE FROM ASA HQ</u>
BIV 1	WK373303	NO	NO	6.4 MILES
BIV 2A	WK377289	YES	NO	5.0 MILES
BIV 2B	WK378288	NO	NO	5.7 MILES
BIV 3A	WK377284	YES	NO	5.1 MILES
BIV 3B	WK375282	NO	NO	5.0 MILES
BIV 4A	WK374275	YES	NO	4.5 MILES
BIV 4B	WK375276	NO	NO	4.6 MILES
BIV 4C	WK375274	NO	NO	4.7 MILES
BIV 5	WK368270	YES	NO	3.9 MILES
BIV 6	WK374270	YES	NO	4.1 MILES
BIV 7	WK328268	YES	NO	4.7 MILES
BIV 8	WK384270	NO	NO	4.7 MILES
BIV 8A	WK385269	YES	YES	4.7 MILES
BIV 9	WK384268	YES	YES	4.8 MILES
BIV 10	WK387269	YES	NO	5.0 MILES
BIV 11	WK387267	YES	NO	5.1 MILES
BIV 11A	WK413240	NO	NO	5.4 MILES
BIV 11B	WK412258	NO	NO	5.6 MILES
BIV 11C	WK419252	YES	NO	5.6 MILES
BIV 12A	WK423252	YES	NO	7.7 MILES
BIV 12B	WK425252	NO	NO	7.7 MILES
BIV 12C	WK462255	YES	NO	10.5 MILES
BIV 13	WK465254	YES	NO	10.6 MILES
BIV 13A	WK466254	NO	NO	10.8 MILES
BIV 15	WK488258	NO	NO	12.1 MILES
BIV 16	WK490261	YES	YES	12.0 MILES
BIV 17	WK498236	NO	NO	14.4 MILES
BIV 18	WK485281	YES	YES	13.3 MILES
BIV 18A	WK483283	NO	NO	14.0 MILES
BIV 19	WK482290	YES	NO	14.0 MILES
BIV 20	WK469299	YES	YES	14.5 MILES
BIV 21	WK474296	YES	NO	14.9 MILES
BIV 22	WK466315	NO	NO	16.2 MILES
BIV 22A	WK465316	YES	YES	16.3 MILES
BIV 24	WK341262	YES	NO	2.2 MILES

BRINDLE LAKE A	WK419317	NO	NO	8.0 MILES
BRINDLE LAKE B	WK416317	NO	NO	8.1 MILES
BRINDLE LAKE C	WK411315	NO	NO	8.2 MILES

**b. DIRECTIONS:**

(1) Bivouacs 1 through 4C, drive south on Texas Avenue turn east on Range Road for 2.2 miles then turn north on Browns Mills/Cookstown Road.

<u>SITE</u>	<u>MILEAGE</u>	<u>SIDE OF ROAD</u>
Biv 1	2.1 miles	Left
Biv 2 A / B	1.6 miles	Left
Biv 3A	1.2 miles	Left
Biv 3B	1.1 miles	Left
Biv 4 A / B / C	.7 miles	Left

(2) Bivouacs 5 through 13A, drive south on Texas Avenue turn east on Range Road.

<u>SITE</u>	<u>MILEAGE</u>	<u>SIDE OF ROAD</u>
Biv 5	2.0 miles	Left
Biv 6	2.2 miles	Left
Biv 7	2.6 miles	Left
Biv 8	2.6 miles	Right
Biv 8A	2.8 miles	Left
Biv 9	2.8 miles	Right
Biv 10	3.0 miles	Right\
Biv 11	3.0 miles	Right
Biv 11A	4.6 miles	Left
Biv 11B	4.7 miles	Left
Biv 11C	5.3 miles	Left
Biv 12A	5.7 miles	Right
Biv 12B	5.7 miles	Right
Biv 12C	6.8 miles	Right
Biv 13A	7.5 miles	Right
Biv 13B	7.1 miles	Right

(3) Bivouac 15 and 17, drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square then turn south on Grand Concourse.

<u>SITE</u>	<u>MILEAGE</u>	<u>SIDE OF ROAD</u>
Biv 15	.5 miles	Right
Biv 17	1.2 miles	Left

(4) Bivouac 16, drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square then drive straight ahead on dirt road for .3 miles the bivouac is on your left

(5) Bivouac 18 through 19 and 22 and 22B drive south on Texas Avenue turn east on Range Road for 9.3 miles then turn north on Pinehurst Road.

<u>SITE</u>	<u>MILEAGE</u>	<u>SIDE OF ROAD</u>
Biv 18	1.3 miles	Right
Biv 18A	1.6 miles	Right
Biv 19	1.9 miles	Right
Biv 22	3.6 miles	Right
Biv 22B	4.0 miles	Right

(6) Bivouacs 20 and 21 drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square then turn north on Pinehurst Road for 2.8 miles to access road for Range 59 Complex.

<u>SITE</u>	<u>MILEAGE</u>	<u>SIDE OF ROAD</u>
Biv 20	.6 miles	Right onto dirt access road
Biv 21	.5 miles	Left

(7) Bivouac 24 exit the cantonment through Pemberton Gate turn northeast on Pointville Road for 1.3 miles turn south on Gas Road for 2.4 miles Bivouac 24 is on your left

c. CAPABILITIES:

- (1) Primary: Temporary encampment in support of unit tactical training.
- (2) Alternate and ammunition capability: None

d. FACILITIES AVAILABLE:

- (1) Latrine - fixed and/or portable co-located within established sites
- (2) Electricity
- (3) Covered Mess
- (4) Concrete Tent Pads
- (5) Shower Facilities - Sites 9, 16, 18, 20, 22A
- (6) 50-man classroom – Bivouacs 2A, 7, 8, 10, 11A, 12A, 16, 17, 18, 20, 21, 22A,
- (7) 200-man classroom – Bivouac 21

24

e. SPECIAL INSTRUCTIONS:

- (1) Pyrotechnics are not allowed in the immediate vicinity of any bivouac site
- (2) Tracked, Stryker and MRAP vehicles may not perform any maneuvers which will cause deep ruts in the bivouac site
- (3) Oversize vehicles must exercise extreme caution to not contact any phone or electrical wiring in the bivouac areas
- (4) Ground guides will be used for any vehicle entering the bivouac sites
- (5) A telephone box is located on the telephone poles within the bivouac sites and are the primary means to communicate with the firing desk
- (6) When units occupy the bivouac sites for multiple training days, they will contact the firing desk every day in the AM to notify of intention to occupy and in the PM to notify of intention to remain over night
- (7) Units are responsible for policing 100-meter radius of the site for clearance inspection and should maintain a daily police of the site.

(8) Blanks and pyrotechnics may be stored in bivouac sites IAW current regulations and Appendix M of this pamphlet; ball ammunition **WILL NOT** be stored in bivouac sites but will be stored on ranges scheduled to conduct qualification

(9) ROTC units will have two Cadre Personnel in the bivouac site when students are present

(10) POV parking and usage must be minimized and organized to avoid interference with local traffic pattern

(11) Latrines (Cat Holes) will not be dug, instruct all personnel to utilize fixed or portable latrines located within the bivouac site

(12) Disassemble all prepared fighting positions and defensive wire; return all areas to their natural state upon completion of training and prior to requesting clearance inspection

(13) Prior to requesting clearance inspection all organizational equipment and personnel will be out of the bivouac site, a unit representative will accompany the inspector and any deficiencies found will be corrected prior to unit release.

f. CONFLICTS: Each TAC Area the bivouac sites are located within.

Table E-2. COL Liberty

a. LOCATION: Located at coordinate WK48332469, Map 1:50,000, DIXJMTTC 001, June 2006, 12.3 miles from ASA Dix Headquarters in TAC 13C

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles. Turn south on Grand Concourse 1.5 miles turn right on Cooks Lane for 1.5 miles entrance to Boeing Vertol on right

c. CAPABILITIES:

- (1) Primary: Tactical Operations Center (TOC) Compound
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, pyrotechnics and smoke

d. FACILITIES AVAILABLE:

- (1) Fenced compound 150 meters x 150 meters
- (2) Two story building containing
  - (a) Two 90-man classrooms
  - (b) Six 1<sup>st</sup> floor offices w/NIPRNET connectivity
  - (c) Four second floor offices/storage rooms
  - (d) SIPRNET capable
- (3) 200-man classroom adjacent to compound

e. SPECIAL INSTRUCTIONS: All requests for Internet connection must be requested six months prior to occupation. Access is controlled by NEC.

f. CONFLICTS: TAC 13C.

Figure E-1 COL  
Liberty



Table E-3. Contingency Operating Location (COL) Victory

a. LOCATION: Located at coordinate WK487235, Map 1:50,000, DIXJMTTC 001, June 2006, 10.8 miles from ASA Fort Dix Headquarters in TAC 13D

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for 9.3 miles turn south on Grand Concourse for 1.5 miles turn west on McNeil Road COL is on your left

c. CAPABILITIES:

- (1) Primary: Theater Immersion Training
- (2) Alternate: BA / AT Training unit bivouac encampment
- (3) Ammunition Capability: Blank ammunition only

d. FACILITIES AVAILABLE:

- (1) Sleeping area (Tents) 668-person capacity
- (2) Administrative Control Cell (Mayor Cell)
- (3) Shower Facility
- (4) Motor Pools (2)
- (5) 3 Whiskey Tents: 1 Dining Tent (140 pax) and 2 Sleeping Tents (70 pax per tent)
- (6) LZ Col
- (7) Guard Towers w/fenced berm compound.

e. SPECIAL INSTRUCTIONS: See Appendix I of this pamphlet for COL SOP and telephone directory

f. CONFLICTS: TAC 13D

Figure E-2 Contingency Operating Location (COL) Victory





Table E-4. Drivers Training Area 2 (DTA - 2)

a. LOCATION: Located at coordinate WK352285, Map 1:50,000, DIXJMTTC 001, June 2006, 3.1 miles from ASA Fort Dix Headquarters in TAC 5E, Vicinity of Pioneer Lake

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for .6 miles turn northeast on Infantry Walk for .5 miles turn north on trail proceed 3 miles through DTA-3 to DTA-2

c. CAPABILITIES:

- (1) Primary: Drivers training and testing area
- (2) Alternate: Support Area requiring hard stand (2) Motor Pools
- (3) Ammunition Capability: None

d. FACILITIES AVAILABLE:

- (1) 30,000 Square meters of asphalt pad
- (2) Administration Building
- (3) Latrine, 1 permanent, 6 portable
- (4) Electricity

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: TAC 5E

Figure E - 3 Drivers Training Area 2 (DTA - 2)

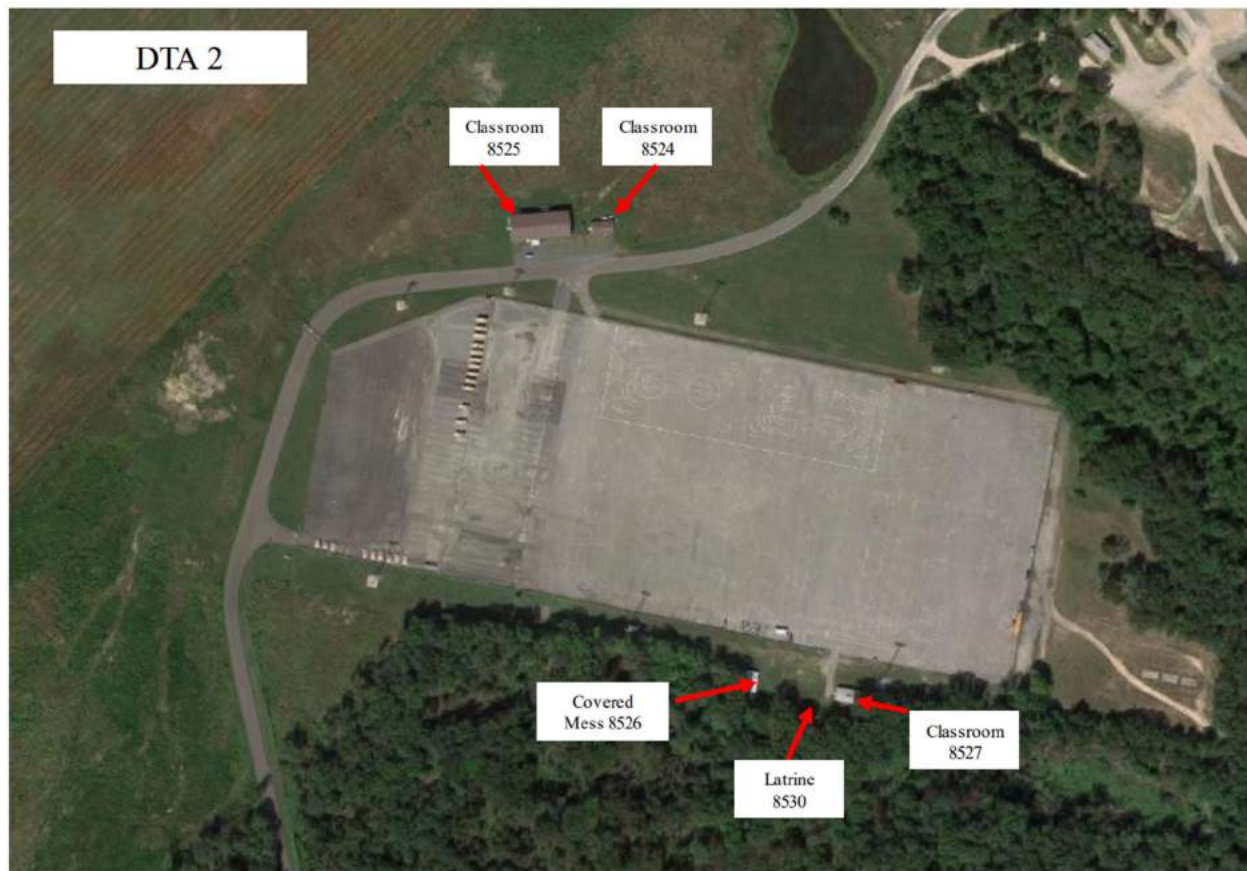


Table E-5. Drivers Training Area 3 (DTA - 3)

a. LOCATION: Located at coordinate WK352285, Map 1:50,000, DIXJMTTC 001, June 2006, 3.1 miles from ASA Fort Dix Headquarters in TAC 5E, Vicinity of Pioneer Lake

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for .6 miles turn northeast on Infantry Walk for .5 miles turn north on trail proceed 3 miles to DTA-3

c. CAPABILITIES:

- (1) Primary: Drivers training and testing area
- (2) Alternate: Support Area not requiring hard stand
- (3) Ammunition Capability: Blanks, Pyrotechnics, NO Aerial Flares

d. FACILITIES AVAILABLE:

- (1) Two miles of unimproved road equipped with a variety of road obstacles and causeway
- (2) Administration Building
- (3) Latrine
- (4) Electricity

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: TAC 5E

Figure E-4 Drivers Training Area 3 (DTA - 3)



Table E-6. Drivers Training Area 4 (DTA - 4) Off Road Course

a. LOCATION: Located at coordinate WK473299, Map 1:50,000, DIXJMTTC 001, June 2006, 14.1 miles from ASA Fort Dix Headquarters in TAC 9E

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for 9.3 miles turn north on Pinehurst Road for 3.0 miles the training area is on the left

c. CAPABILITIES:

- (1) Primary: Driver training and testing
- (2) Alternate: POL handlers training site
- (3) Ammunition Capability: Blanks, Pyrotechnics and Simunitions

d. FACILITIES AVAILABLE:

- (1) Three miles of unimproved roads
- (2) Classroom

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: TAC 9E

Figure E-5 Drivers Training Area 4 (DTA - 4) Off Road Course





Table E-7. Drivers Training Area 5 (DTA - 5) Off Road Course

a. LOCATION: Located at coordinate WK474302, Map 1:50,000, DIXJMTTC 001, June 2006, 14.1 miles from ASA Fort Dix Headquarters in TAC 9D

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for 9.3 miles turn north on Pinehurst Road for 3.0 miles the training area is on the right

c. CAPABILITIES:

- (1) Primary: Driver training and testing
- (2) Alternate: Support area not requiring hard stand
- (3) Ammunition Capability: Blanks, Pyrotechnics and Simunitions

d. FACILITIES AVAILABLE:

- (1) Three miles of unimproved roads
- (2) Classroom
- (3) Latrine

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: TAC 9D

Figure E - 6 Drivers Training Area 5 (DTA - 5) Off Road Course



Table E-8. Engineer Heavy Equipment Training Site

a. LOCATION: Located at coordinate WK493260, Map 1:50,000, DIXJMTTC 001, June 2006, 9.5 miles from ASA Fort Dix Headquarters in TAC 12A

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square and continue straight on the tank trail site is on your right

c. CAPABILITIES:

- (1) Primary: Engineer heavy equipment operations
- (2) Alternate: None
- (3) Blanks, Pyrotechnics and Simunitions

d. FACILITIES AVAILABLE:

- (1) Tower
- (2) Fenced compound with overhead equipment cover
- (3) Portable Latrine

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: None

Figure E-7 Engineer Heavy Equipment Training Site

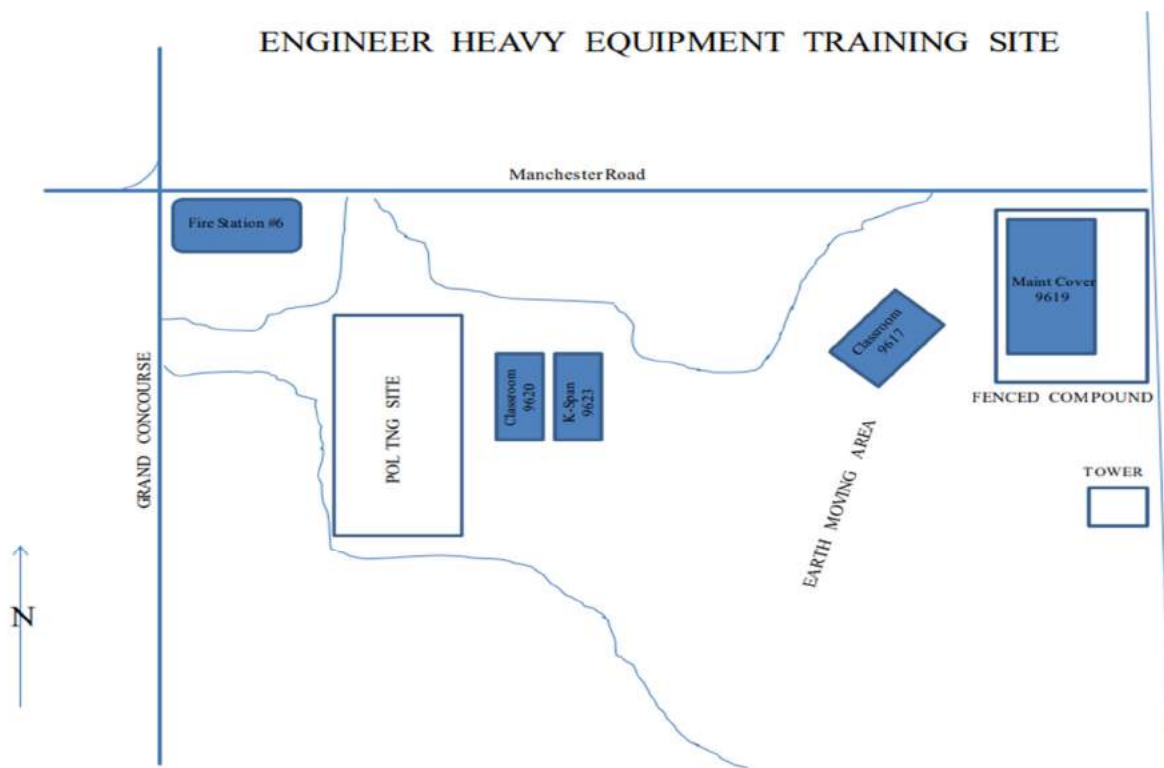


Table E-9. Explosive Ordnance Disposal Range (EOD) Verdun Range (WW II)

a. LOCATION: Located at coordinate WK478270, Map 1:50,000, DIXJMTTC 001, June 2006, 9.6 miles from ASA Fort Dix Headquarters

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for 9.3 miles turn north on Pinehurst Road for .3 miles EOD Range is on your left

c. CAPABILITIES:

- (1) Primary: Emergency Destruction of hazardous Ordnance by EOD Personnel
- (2) Alternate: Demolition training of EOD Personnel
- (3) Ammunition: Common Demolition Material

d. FACILITIES AVAILABLE:

- (1) Bunker (Personnel Capacity of six (6))
- (2) Entrance Gate - Will be closed during all demolition operations

e. SPECIAL INSTRUCTIONS:

- (1) Disposal operations will only be performed by EOD qualified personnel
- (2) Disposal operations are not conducted with less than two EOD qualified personnel
- (3) Range Control firing desk will be notified of the amount and type of shots to be detonated
- (4) Range limit is 25 lbs. to include donor charges; any request to exceed the explosive weight will include fragmentation distance calculations and protective measures to be used. The range safety officer will approve the request or find an alternate location for the disposal operation
- (5) Prior to detonation an audible warning will be transmitted three (3) times to alert personnel of an impending detonation
- (6) The firing desk will be notified five (5) minutes prior to detonations in order to ensure airspace is cleared and immediately after detonation to ensure all personnel are safe. If the firing desk does not receive the all clear notification within five minutes of expected detonation time a range representative will be dispatched to investigate
- (7) Scheduling the EOD Range will be coordinated thru the 87<sup>th</sup> EOD (609)754-2205; after receiving approval contact ASA Fort Dix Training Management Division (TMD) (609)562-2201/2202.
- (8) All non-organic (metal, plastic and paper) will be policed prior to requesting clearance; clearance of the range will be coordinated and conducted by the 87<sup>th</sup> EOD

f. CONFLICTS: Range 40, Engineer Training Site and Range Road (If exceeding 25lbs NEW); close coordination between EOD personnel and any unit using the site is required

Figure E-8 Explosive Ordnance Disposal Range (EOD) Verdun Range (WW II)



Table E-10. HF-11 - Gas Chamber (CS) - Flanders Lorraine (WW I)

a. LOCATION: Located at coordinate WK351247, Map 1:50,000, DIXJMTTC 001, June 2006, 5.4 miles from ASA Fort Dix Headquarters on Range Road

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for .5 miles range is on the right

c. CAPABILITIES:

(1) Primary: Chemical, Biological, Radiological and Nuclear (CBRN) training facilities which include a CS Chamber for mask confidence training

(2) Alternate: Battalion/Brigade TOC area for command post or staff exercises

(3) Ammunition Capability: CS capsules or powder only

d. FACILITIES AVAILABLE:

(1) CS Chamber

(2) Classrooms (2)

(3) Bleacher Enclosure

(4) Portable latrines

e. SPECIAL INSTRUCTIONS:

(1) Only qualified personnel are allowed to operate the CS Chamber: personnel with military occupational specialties of chemical defense or graduates of an accredited service CBRN Officer/NCO defense course

(2) The OIC during CS operations will be an E-7 or above

(3) A combat medic or current lifesaver qualified individual will be present during all CS operations

(4) All participants will ensure that masks are to 10/20 standards prior to entering the CS Chamber

(5) Any participants with respiratory conditions, cardiac conditions, acne, active dermatitis, open wounds or pregnant will be cleared by a medical officer prior to using the CS Chamber

(6) Wearing contact lenses is prohibited in the CS Chamber

(7) An adequate supply of water will be on hand during operations to reduce heat related injuries and aid in decontamination

(8) Request medical evacuation through range control for anyone suffering adverse reactions to exposure, other than coughing or minor burning after use

(9) Use only appropriate heat sources to burn the CS capsules and powder i.e., candle and sterno. High temperature dispersion of CS may release hydrogen cyanide and hydrogen chloride

(10) Always follow environmental guidelines and material safety data sheets (MSDS)

(11) OIC must complete the qualification statement ASAFD Form 2258-R and submit to TMD when scheduling and ASAFD Form 2259-R (CS Chamber Safety Checklist) prior to using the facility. Both documents will be submitted to range control upon completion of training or when requested by range personnel

f. CONFLICTS: None



Figure E - 9. HF-11 - Gas Chamber (CS) - Flanders Lorraine (WW I)

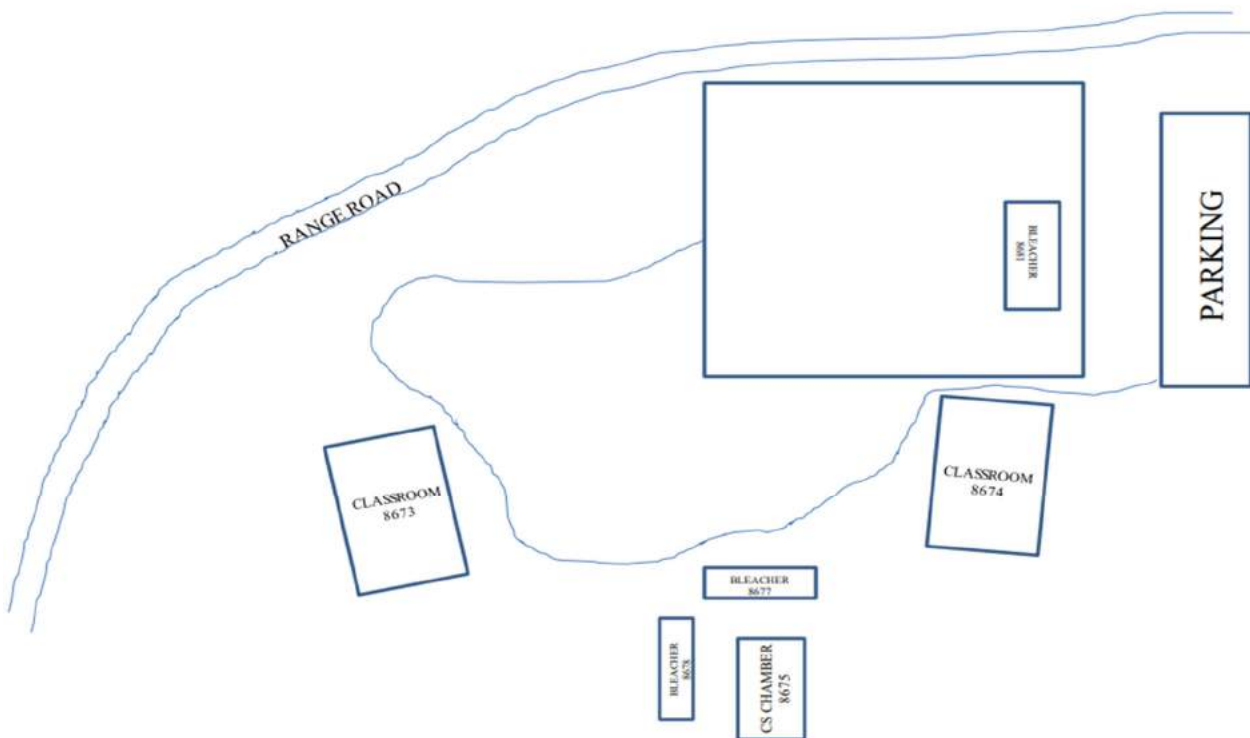
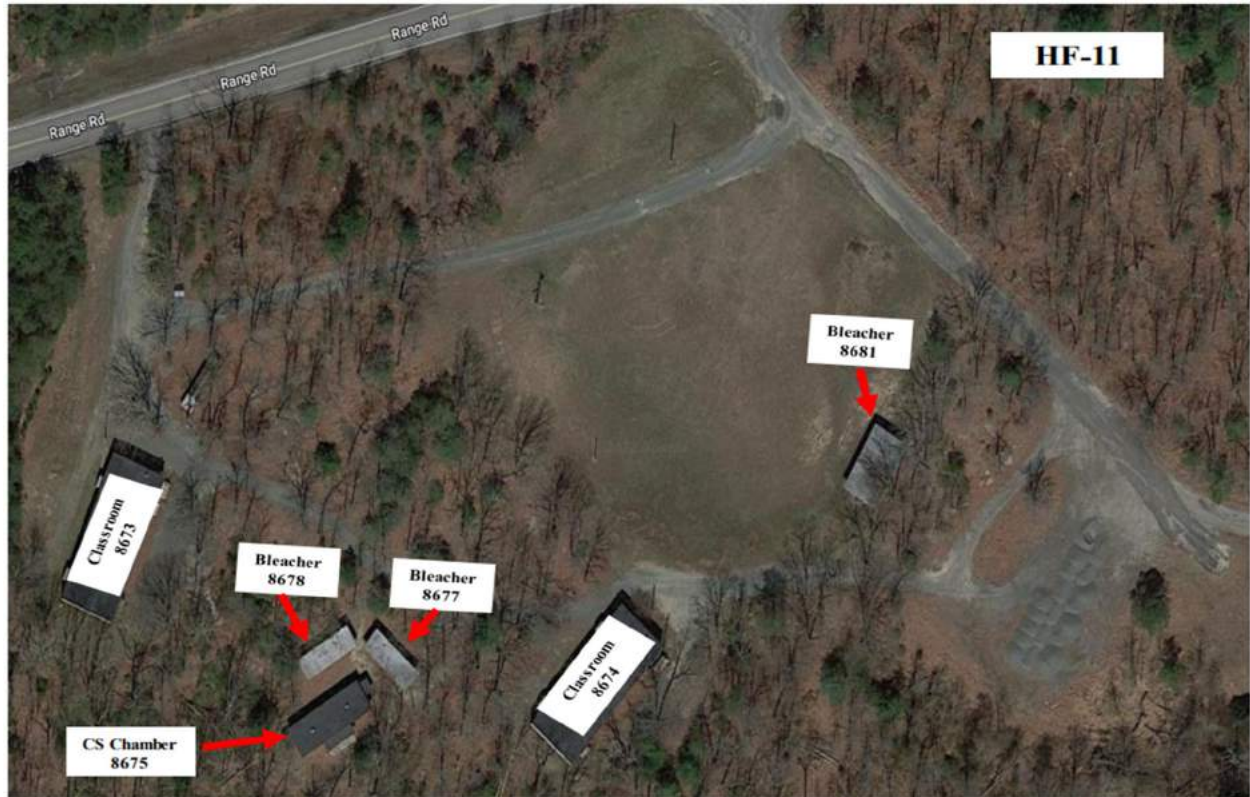




Figure E-10. USASAFD Form 2258-R, 1 Nov 10

OFFICE SYMBOL

DATE:

MEMORANDUM FROM:

MEMORANDUM FOR US Army Support Activity Fort Dix, Range Safety Officer

SUBJECT: CS Chamber Qualification Statement

1. The following individual is certified to run the CS Chamber (HF-11) at US Army Support Activity Dix:

NAME

RANK

RANGE CARD#

2. The above-named individual has been trained and is authorized to operate the CS Chamber by virtue of:

\_\_\_\_\_ Branch /MOS of 74A or 74D

\_\_\_\_\_ Attended accredited CBRN Defense School

Location: \_\_\_\_\_ Date: \_\_\_\_\_

3. They have read and fully understand all range and CS Operational requirements located in ASAD Pam 350-3 and applicable chemical training operation publications and will comply with all requirements.

*Certifying Official Signature*

Printed Name

Rank

Position of Certifying Official

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CS CHAMBER SAFETY CHECKLIST (HF-11)

DATE: \_\_\_\_\_ UNIT: \_\_\_\_\_

ITEM      INITIAL

1. OIC/RSO signed the Qualification Statement, Annex 2? \_\_\_\_\_
2. Combat Lifesaver or qualified medical personnel on site? \_\_\_\_\_
3. OIC has observed the wind direction, speed and potential downwind hazards prior to charging the chamber? \_\_\_\_\_
4. Operational Checks.
  - a. OIC/RSO checked the medical support personnel masks for serviceability prior to beginning CS operations? \_\_\_\_\_
  - b. A 5-gallon container of water is readily available for decontamination? \_\_\_\_\_
  - c. Only CS capsules or CS powder is used in the chamber? \_\_\_\_\_
  - d. An individual is positioned at the entrance and exit to assist entry and exit? \_\_\_\_\_
  - e. Two personnel operating inside the chamber; OIC or RSO must be present? \_\_\_\_\_
  - f. Each mask is checked for serviceability prior to entering chamber? \_\_\_\_\_
  - g. Repair parts are on hand to perform operator/organizational maintenance? \_\_\_\_\_
  - h. Personnel entering chamber have been screened for profiles and medical problems prior to entering? \_\_\_\_\_
  - i. Personnel are not subjected to CS exposure unnecessarily? \_\_\_\_\_
  - j. No more than ten personnel authorized in the chamber at any time? \_\_\_\_\_
  - k. Chamber initially charged with no more than six CS capsules or 1 to 1 ½ teaspoons of CS powder? \_\_\_\_\_
  - l. No more than one capsule or 1 to ¼ teaspoons of CS powder is used to recharge the chamber? \_\_\_\_\_

m. Personnel leaving the chamber are escorted out of the chamber and directed upwind, told to unmask, face into the wind, open their eyes but do not rub them. Personnel are also informed to shower with cool water initially then warm soapy water when they bathe. \_\_\_\_\_

n. Only 1 door is opened at any time during operations? \_\_\_\_\_

#### 5. Clearing the CS Chamber.

a. OIC/RSO checks inside the chamber for excess concentration/buildup of CS? \_\_\_\_\_

b. OIC/RSO checks wind speed and direction for possible downwind hazards prior to aeration. Particular attention must be given to exposing Range Road to significant concentrations; Range Road is a shared thoroughfare with the State of New Jersey and is travelled by non-affiliated personnel. \_\_\_\_\_

c. Upon completion of the exercise, **BEFORE AERATION**, notify range control and wait until a range control representative arrives to authorize aeration of the chamber? Options for aeration are.

(1) Not to aerate.

(2) Wait to aerate.

(3) Open 1 door for a short period; shut the door, reopen, etc., releasing small amounts of CS at a time.

(4) Open both doors and aerate the Chamber.

d. Range Control will conduct a joint inspection of the CS Chamber and training area prior to releasing the unit.

OIC NAME: \_\_\_\_\_

RANK: \_\_\_\_\_

*Signature:* \_\_\_\_\_

Table E-11. Home Station Training Lane East (HSTL - East)

a. LOCATION: Located at coordinate WK458324, Map 1:50,000, DIXJMTTC 001, June 2006, 17 miles from ASA Fort Dix Headquarters on Archer town Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles. Turn north on County Road for 5.0

c. CAPABILITIES:

- (1) Primary: IED Defeat Training Lane
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions

d. FACILITIES AVAILABLE:

- (1) Three miles of improved trail network
- (2) Four villages

e. SPECIAL INSTRUCTIONS:

- (1) Pyrotechnics are not authorized inside of structures but may be used outside of buildings
- (2) MILPLAY on Range Road portion of training lane is strictly prohibited; range road may only be used to transit from entry points to the HSTL

f. CONFLICTS:

- (1) Range 86 is a separate training area which must be scheduled for use
- (2) TAC 9D is a separate training area which must be scheduled for use
- (3) Range Road - is for the uninterrupted flow of traffic to range training areas

Figure E-12 Home Station Training Lane East (HSTL - East)



Table E-12. Home Station Training Lane West (HSTL - West)

a. LOCATION: Located at coordinate WK331261, Map 1:50,000, DIXJMTTC 001, June 2006, 2.1 miles from ASA Fort Dix Headquarters on Browns Mills/Juliustown Road

b. DIRECTION: Drive south on Texas Avenue for 4.5 miles into Browns Mills Road turn right on Broadway Street after one block turn right on Browns Mills/Juliustown Road for 3 miles CTT Site is on right

c. CAPABILITIES:

- (1) Primary: IED Defeat Training Lane
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions

d. FACILITIES AVAILABLE:

- (1) Administrative Building for Command & Control Team
- (2) Three miles of improved roads and trail network
- (3) Configurable Structures
- (4) Road Overpass

e. SPECIAL INSTRUCTIONS:

- (1) USAF organizations have Priority of Training
- (2) Entry into EPA Superfund site (Fenced Compound) strictly forbidden

f. CONFLICTS: TAC Areas 2A & 2B

Figure E - 13 Home Station Training Lane West (HSTL – West)



Table E-13. Internment Resettlement (IR SITE) TAC 3C

a. LOCATION: Located at coordinate WK342260, Map 1:50,000, DIXJMTTC 001, June 2006, 2.4 miles from ASA Fort Dix Headquarters off of Pointville Road

b. DIRECTION: Drive south on Texas Avenue for 4.5 miles into Browns Mills Road turn right on Broadway Street after one block turn right on Browns Mills/Juliustown Road for 3.1 to Pointville road and turn right for .5 miles to access road on right IR Site will be 2 miles on left

c. CAPABILITIES:

- (1) Primary: Enemy Prisoner of War (EPW) compound training site
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions

d. FACILITIES AVAILABLE:

- (1) Fenced in compound equipped with gates, observation towers and Confinement Barracks
- (2) Classroom

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: None

Figure E - 14 Internment Resettlement (IR SITE) TAC 3C

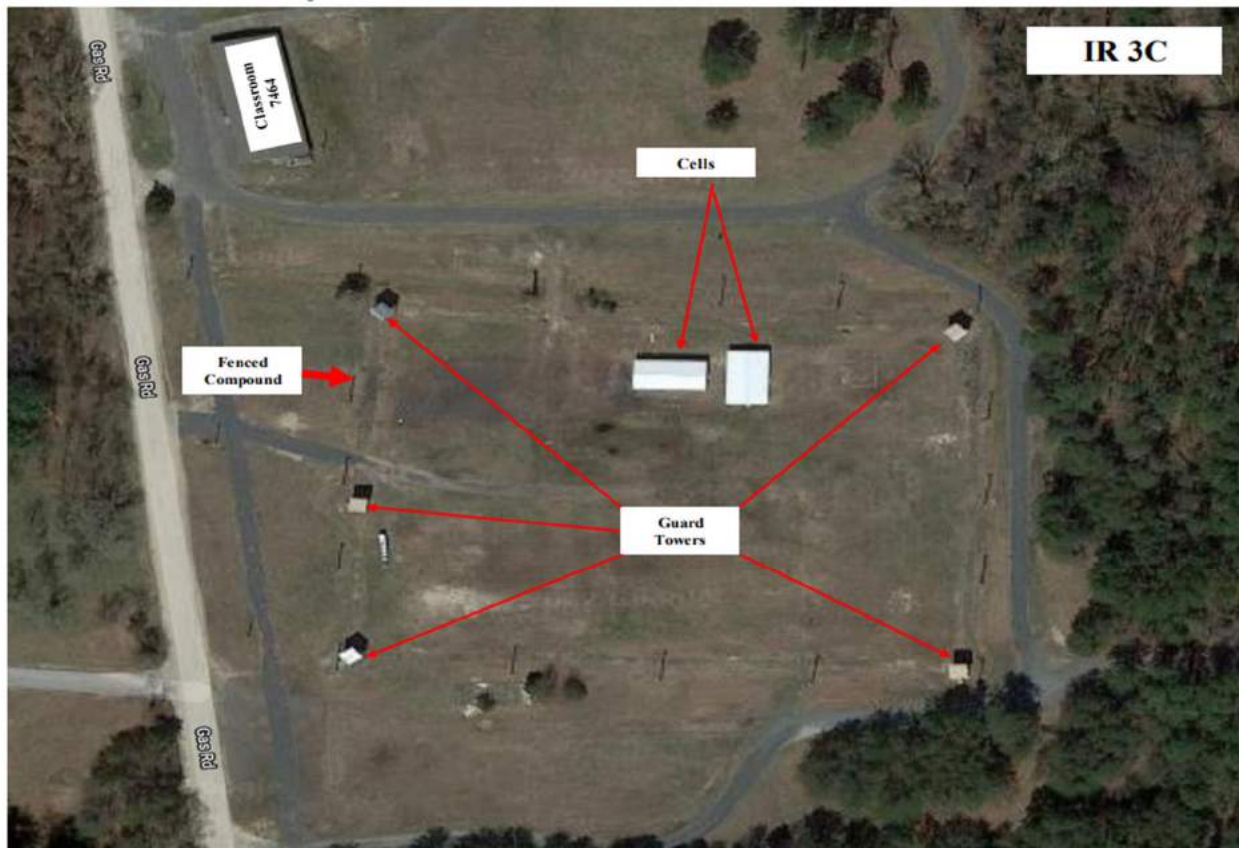




Table E-14. Internment Resettlement (IR Site) TAC 12C

a. LOCATION: Located at coordinate WK504220, Map 1:50,000, DIXJMTTC 001, June 2006, 10.3 miles from ASA Fort Dix Headquarters on Highway 70 VIC Whiting NJ

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn south on Grand Concourse to Highway 70, turn left onto Highway 70 for 3.1 miles entrance to IR 12C is on your right

c. CAPABILITIES:

- (1) Primary: Enemy Prisoner of War (EPW) compound training site
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions

d. FACILITIES AVAILABLE:

- (1) Fenced in compound equipped with gates and observation towers
- (2) Guard Shack
- (3) Administration building with three classrooms
- (4) Storage Building
- (5) Confinement Buildings
- (6) Tent Pads – Exterior of Compound

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: None

Figure E - 15 Internment Resettlement (IR Site) TAC 12C

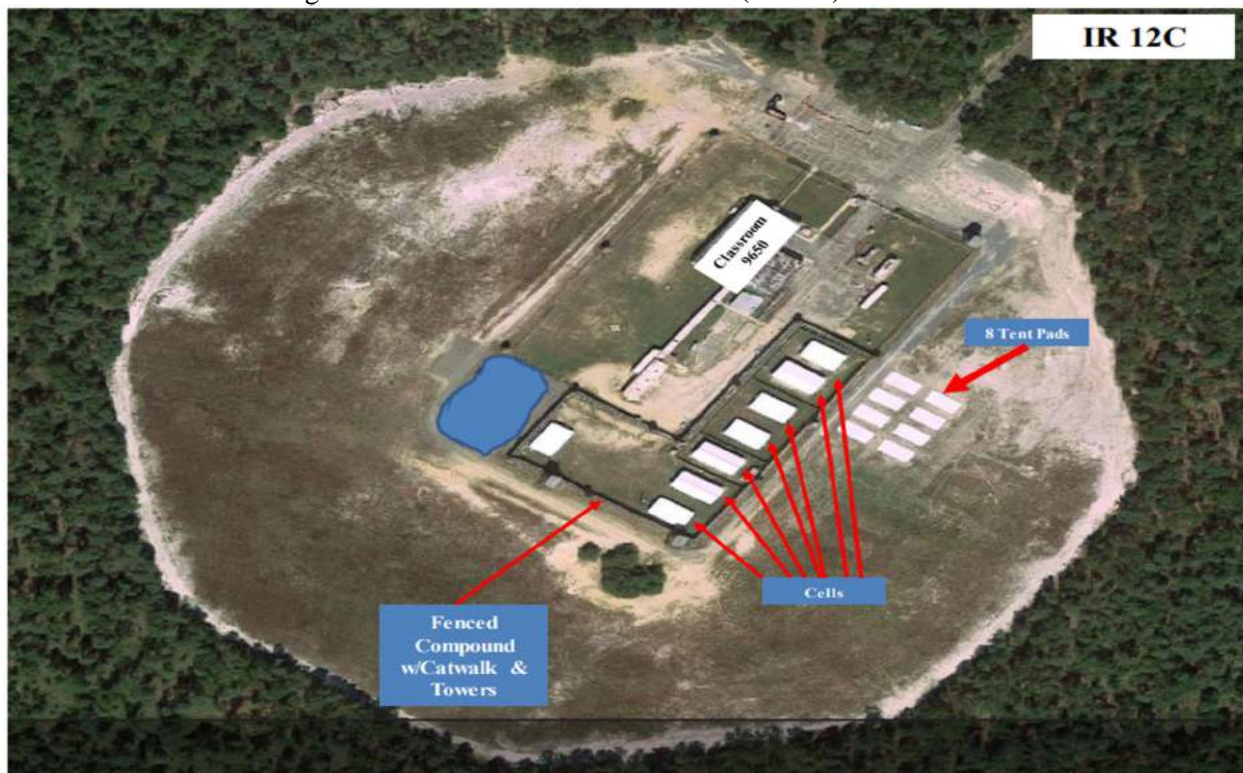


Table E-15. LAND NAVIGATION COURSE 2 - (LAND NAV 2) (LN 2)

a. LOCATION: Located at coordinate WK298279, Map 1:50,000, DIXJMTTC 001, June 2006, in TAC 1F. The course is bounded to the northwest by Pemberton Road; northeast of Juliustown Road; and to the south by a firebreak that bisects TAC 1F.

b. DIRECTION: Exit through the Route 68 and at the light turn left onto Pemberton / Fort Dix Road for 2 miles, turn left onto access road.

c. CAPABILITIES:

- (1) Primary: Intermediate day land navigation course
- (2) Alternate: Advanced night land navigation

d. FACILITIES AVAILABLE:

- (1) Unit Assembly Area
- (2) Classroom
- (3) Two 100-meter pace courses
- (4) Two compass verification points
- (5) 12 start points each with 2 lanes and 7 points per lane. Total distance of lanes ranges from 290 - 630 meters (average 400 meters)
- (6) Portable latrines in proximity of assembly area

e. SPECIAL INSTRUCTIONS:

- (1) Have a plan to locate lost soldiers prior to beginning training, panic azimuth
- (2) Course packets are available at the firing desk

f. CONFLICTS: TAC 1F

Table E-16. LAND NAVIGATION COURSE 3 - (LAND NAV 3) (LN 3)

a. LOCATION: Located at coordinate WK332262, Map 1:50,000, DIXJMTTC 001, June 2006, in TAC Area 3A. This course is bounded to the west by Juliustown/Browns Mills Road; to the north by Pemberton Road; and to the east by Gas Road

b. DIRECTION: Drive south on Texas Avenue for 4.5 miles into Browns Mills Road turn right on Broadway Street after one block turn right on Browns Mills/Juliustown Road for 3 miles Land Nav 3 is on right

c. CAPABILITIES:

- (1) Primary: Beginners and Intermediate day land navigation course
- (2) Alternate: Advanced night land navigation

d. FACILITIES AVAILABLE:

- (1) Unit Assembly Area
- (2) 100 Meter Pace Count Trail
- (3) Compass Verification Site
- (4) Four start points each with three lanes. Total distance of lanes ranges from 2800 - 3500 meters with legs of 230 - 1200 meters
- (5) Portable Latrines

e. SPECIAL INSTRUCTIONS:



- (1) Have a plan to locate lost soldiers prior to beginning training, panic azimuth
- (2) Course packets are available at the firing desk

f. CONFLICTS: TAC 3A

Table E-17. LAND NAVIGATION COURSE 4 - (LAND NAV 4) (LN 4)

a. LOCATION: Located at coordinate WK343271, Map 1:50,000, DIXJMTTC 001, June 2006, in TAC Area 3C. This course is bounded to the east by Gas Road; to the north by Pointville Road; and to the south by Pemberton/Browns Mills Road

b. DIRECTION: Drive south on Texas Avenue turn west on tank trail .1 mile outside Texas Gate between Amphibious Lake and the Quarry, take the trail to Gas Road turn south on Gas Road for 2 miles entrance is on your left

c. CAPABILITIES:

- (1) Primary: Intermediate day land navigation course with scenarios reinforcing intersection, resection and terrain association. Leaders may vary the degrees of difficulty
- (2) Alternate: Advanced night land navigation

d. FACILITIES AVAILABLE:

- (1) Unit Assembly Area
- (2) 100 Meter Pace Count Trail
- (3) Compass Verification Site
- (4) Nine start points each with two lanes. The night land navigation course has twelve start points, each with two lanes. Total distance of lanes is 4800 - 5800 meters, with legs of 300 - 1000 meters
- (5) Portable Latrines

e. SPECIAL INSTRUCTIONS:

- (1) Have a plan to locate lost soldiers prior to beginning training, panic azimuth
- (2) Course packets are available at the firing desk

f. CONFLICTS: TAC 3C

Table E-18. LEADERSHIP REACTION COURSE

a. LOCATION: Located at coordinate WK331273, Map 1:50,000, DIXJMTTC 001, June 2006, in TAC 3A, 2.1 miles from ASA Fort Dix Headquarters off-of Pointville Road

b. DIRECTIONS: Drive south on Texas Avenue turn west on tank trail .1 mile outside Texas Gate between Amphibious Lake and the Quarry, take the trail to Gas Road turn north on Gas Road Leadership Reaction Course is on your left

c. CAPABILITIES:

- (1) Primary: Test of mental and physical abilities, group interaction and problem-solving skills, cultivates spirit and daring, promotes teamwork and provides a challenge to small unit leaders. The course is designed with 15 situational exercises with varying degrees of difficulty; the course is intended to be run on a timed rotational system with teams of eight personnel
- (2) Alternate: None
- (3) Ammunition Capability: None

d. FACILITIES AVAILABLE:

- (1) Connex with station equipment
- (2) 15 Stations
- (3) Portable Latrines

e. SPECIAL INSTRUCTIONS:

- (1) Prior to running the course an inspection of each obstacle should be conducted
- (2) Negotiation of all tasks is supervised by an assistant instructor
- (3) Training on the course should be postponed when the obstacles are wet or slippery
- (4) Heavy duty gloves must be worn
- (5) Instruction guide is available at the Range Control
- (6) JROTC units must have their Risk Assessment approved by TMD Chief prior to utilization

f. CONFLICTS: None

Table E-19. Litter Obstacle Course

a. LOCATION: Located at coordinate WK375282, Map 1:50,000, DIXJMTTC 001, June 2006, 6.1 miles from ASA Fort Dix Headquarters in TAC 5C

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2 Turn North on Cookstown/Brownsmill road proceed  $\frac{3}{4}$  miles to entrance on left

c. CAPABILITIES:

- (1) Primary: This course tests mental and physical confidence, coordination and teamwork while transporting injured personnel and negotiating obstacles
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, pyrotechnics and smoke

d. FACILITIES AVAILABLE:

- (1) Ten (10) Obstacles
- (2) Classroom
- (3) Portable Latrine

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: Bivouac 3 A/B

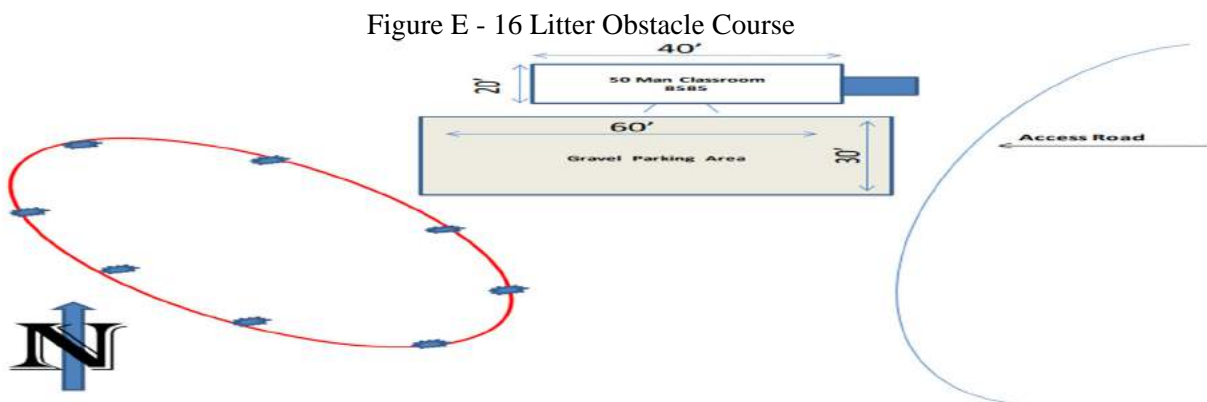


Table E-20. Obstacle Course

a. LOCATION: Located at coordinate WK336268, Map 1:50,000, DIXJMTTC 001, June 2006, 1.5 miles from ASA Fort Dix Headquarters off Pointville Road

b. DIRECTION: Drive south on Texas Avenue turn west on tank trail .1 mile outside Texas Gate between Amphibious Lake and the Quarry, take the trail to Gas Road turn south on Gas Road the Obstacle Course is on your right

c. CAPABILITIES:

(1) The course has various obstacles that are designed to be negotiated quickly as a test of various basic skills, running the course is a test of physical conditioning

(2) Alternate: None

(3) Ammunition Capability: None

d. FACILITIES AVAILABLE:

(1) Obstacles: 17

(2) Portable Latrines

e. SPECIAL INSTRUCTIONS:

(1) Prior to running the course an inspection of each obstacle should be conducted

(2) Negotiation of higher risk and more dangerous obstacles will be monitored and supervised by an assistant instructor

(3) Training should be suspended or postponed during rain or when the obstacles are wet

(4) Heavy duty gloves must be worn

f. CONFLICTS: None



Table E-21. Range 1 – Heavy Demo Range

a. LOCATION: Located at coordinate WK406313, Map 1:50,000, DIXJMTTC 001, June 2006, 6.7 miles from ASA Fort Dix Headquarters on Cranberry Cannors Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for 1.2 miles, turn right on Hockamick/Cranberry Cannors Road for 2.1 miles

c. CAPABILITIES:

- (1) Primary: Army Research Development Center Electronic Equipment Testing
- (2) Alternate: All training requests will be approved by Range Safety Office
- (3) Ammunition Capability: Determined by Mission Requirements

d. FACILITIES AVAILABLE:

- (1) 2 Acre Fenced Compound
- (2) 7 Permanent Structures; Administrative, Storage and Maintenance
- (3) Facilities are utilized by CERDEC and USASAFD Range Support; units authorized training do not have access to permanent structures a porta-john is established within the training area for use



e. SPECIAL INSTRUCTIONS:

- (1) Secure Facility Special Access Required.
- (2) Ammunition capabilities and restrictions will be determined on a case-by-case basis

f. CONFLICTS: N/A

Figure E - 17 Range 1

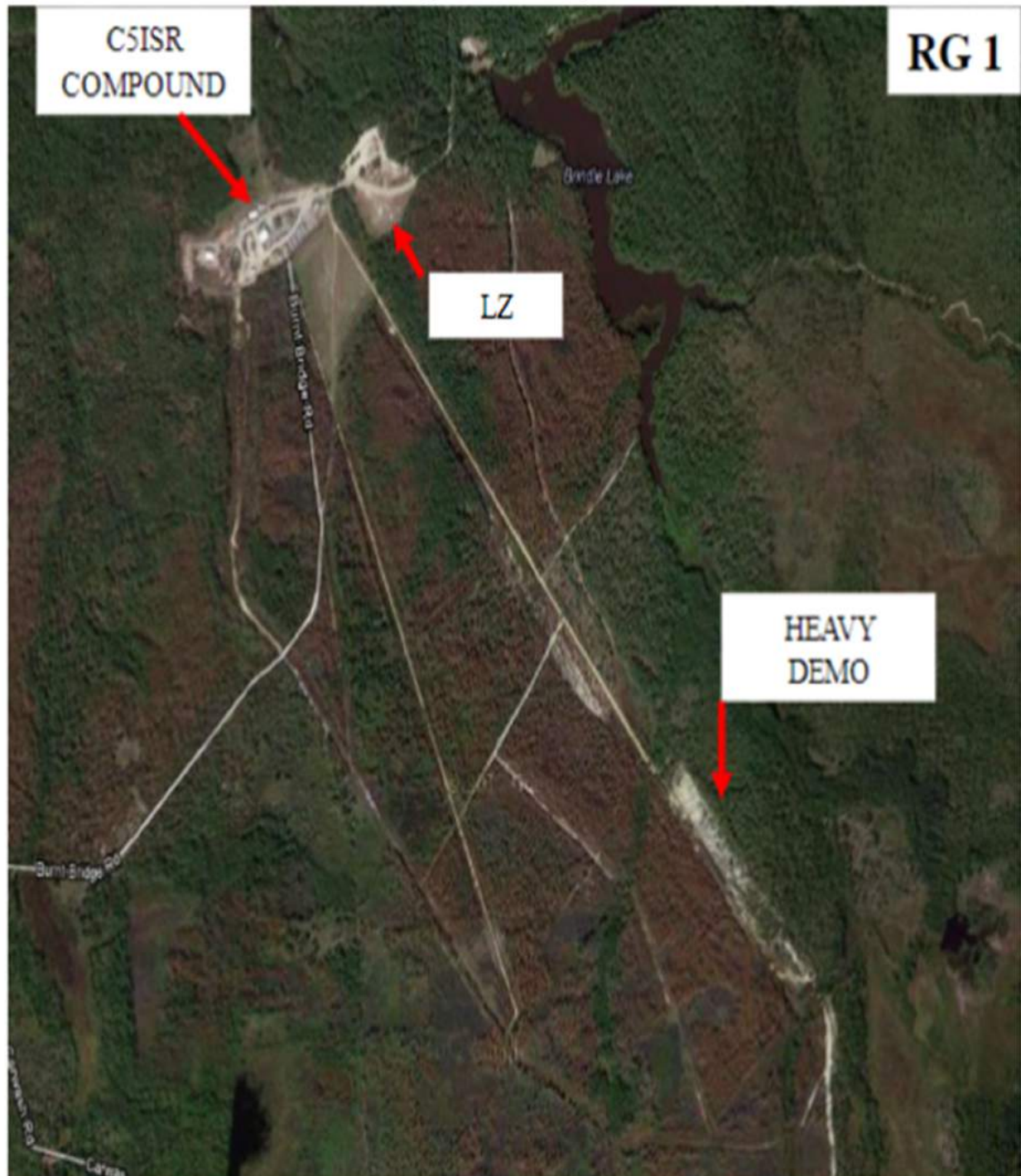




Table E-22. Range 3A – Hand Grenade Qualification Course (Non-Firing) (HGQC)

a. LOCATION: Located at coordinate WK381295, Map 1:50,000, DIXJMTTC 001, June 2006, 4.7 miles from ASA Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 2.1 miles. Turn east on Cooks Corner Road and continue for .4 miles, the range is on the left

c. CAPABILITIES:

- (1) Primary: Mock Live Bay Grenade Range
- (2) Alternate: Hand Grenade Qualification Course
- (3) Ammunition Capability: Dummy (inert and practice) hand grenades, blanks and pyrotechnics

d. FACILITIES AVAILABLE:

- (1) Firing points: 6 Bays
- (2) Ammunition Issue Building
- (3) Classroom
- (4) Bleacher Enclosure
- (5) Latrine: located across the street on range 3B
- (6) Covered Mess (Shared with range 4)

e. SPECIAL INSTRUCTIONS:

- (1) Gloves and ponchos will not be used while throwing grenades from the bays in preparation for range 3B
- (2) Personnel will be instructed, shown and physically demonstrated the actions to be taken for an accidental drop or short throw of a live grenade
- (3) All personnel will wear their ACH, protective vest, hearing protection and eye protection (required uniform for throwing live grenades also)
- (4) Aerial flares are not authorized

f. CONFLICTS: TAC 7C

Figure E - 18 Range 3A – Hand Grenade Qualification Course (Non-Firing) (HGQC)

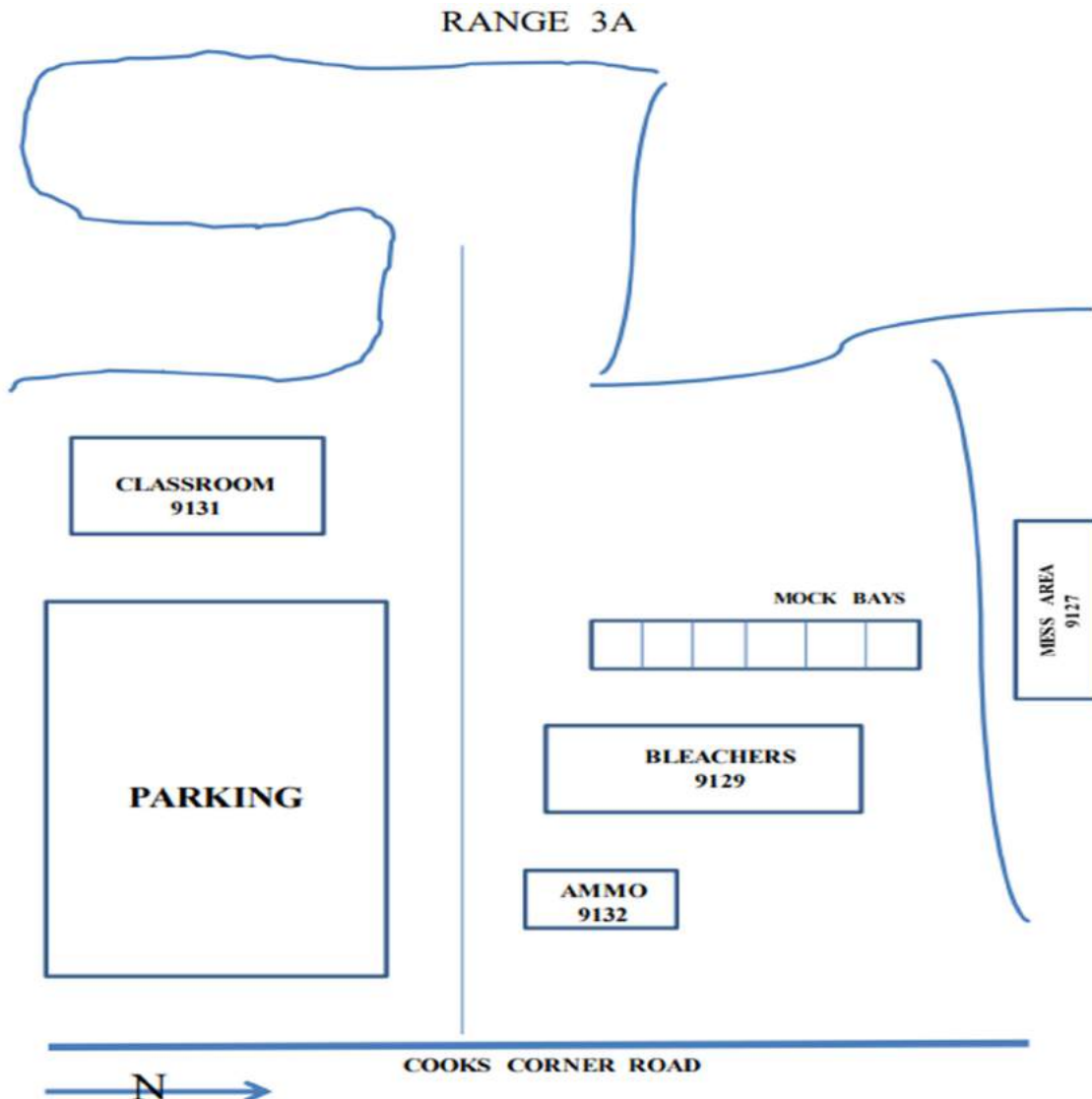






Table E-23. Range 3B - Hand Grenade Familiarization Range (Live) (HGFR)

a. LOCATION: Located at coordinate WK385294, Map 1:50,000, DIXJMTTC 001, June 2006, 4.7 miles from ASA Fort Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 3.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .4 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: Hand Grenade Live
- (2) Alternate: None
- (3) Ammunition Capability: Hand Grenades (Fragmentation, Concussion and Smoke)

d. FACILITIES AVAILABLE:

- (1) Firing Points: 6 live throw bays
- (2) Control Tower Elevated
- (3) Ammunition Issue Building
- (4) Viewing and Shrapnel Retaining Wall
- (5) Latrine
- (6) Installed Public Address System
- (7) Call Boxes Located at Entry Control Point and Inside Tower



e. SPECIAL INSTRUCTIONS:

- (1) Operation of this facility requires a coordination meeting with USASAFD Range Safety Officer
- (2) The following protective equipment will be worn within 150 meters, to include personnel in the tower and observation bays, of the live HE grenade range when conducting live grenade throws:
  - (a) Helmet
  - (b) Fragmentation Protective Vest
  - (c) Hearing Protection
  - (d) Eye Protection
- (3) A road guard will be posted at the entrance of the range to control entry and exit
- (4) Live grenades will only be issued just prior to throwing
- (5) Prior to throwing grenades all of the pits are to be checked to ensure the safety wall has a minimum clearance of ten inches
- (6) Gloves and ponchos will not be worn while throwing grenades
- (7) Load bearing equipment, weapons or any other paraphernalia which hinders the act of throwing will not be worn in the bays
- (8) When a thrown grenade fails to detonate it will be reported to Range Control Firing Desk immediately; **Do Not** throw another grenade in the bay until EOD has responded and disposed of the UXO. Personnel in the pit where the UXO occurred will remain in the pit for a minimum of thirty minutes before they exit the pit and return to the safety area (time allows for a delayed detonation)
- (9) Organizations experiencing a high dud rate will suspend throwing grenades, after consulting with EOD personnel, and initiate an ammunition malfunction report DA Form 4379

f. CONFLICTS: Range 10

Figure E - 19 Range 3B - Hand Grenade Familiarization Range (Live) (HGFR)

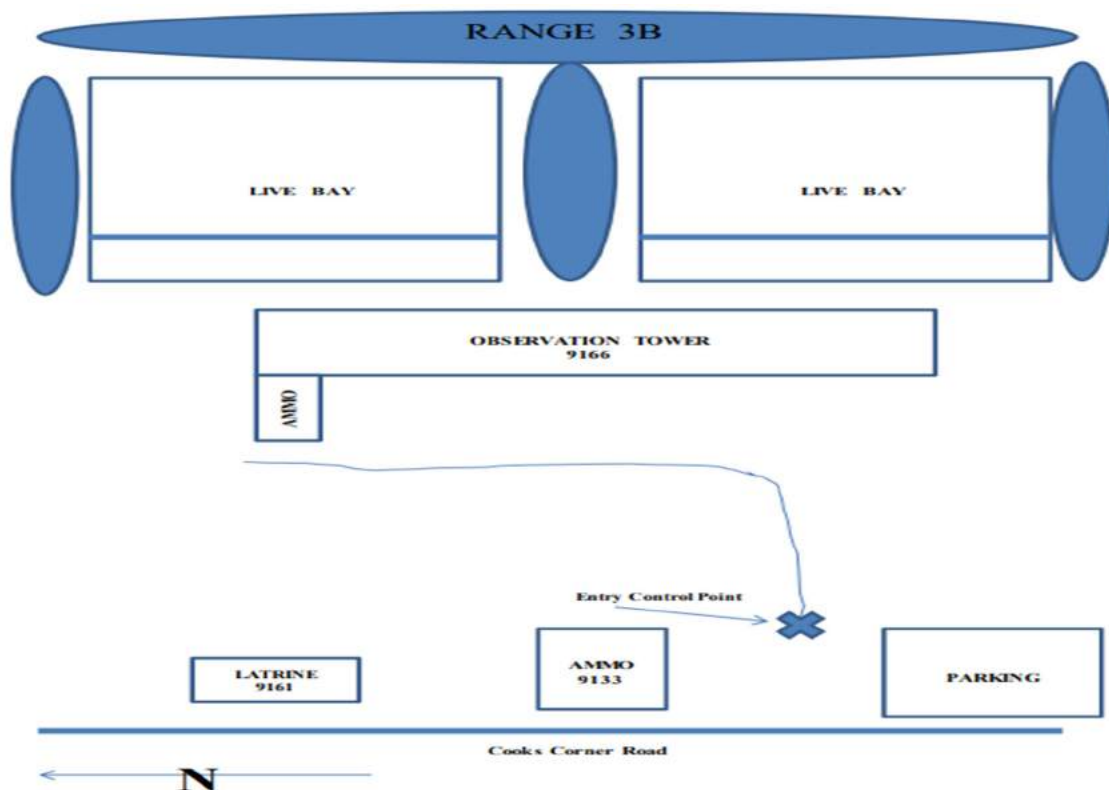




Table E-24. Range 4 – Force on Force Shoot House (LFXSH) (SRTA, UTM, and Simunition only)

a. LOCATION: Located at coordinate WK383297, Map 1:50,000, DIXJMTTC 001, June 2006, 4.9 miles from ASA Headquarters on Cooks Corner Road

b. DIRECTIONS: Drive south on Texas Avenue turn east on Range Road for 2.2 miles; turn north on Browns Mills/Cookstown Road for 2.1 miles; turn east on Cooks Corner Road for .8 miles range is on your left

c. CAPABILITIES:

- (1) Primary: Force on Force Shoot House
- (2) Alternate: None
- (3) Ammunition Capability: Simunitions, CCMCK and blanks

d. FACILITIES AVAILABLE:

- (1) Single story Simunitions-Fire Shoot House
- (2) Range Operations Center w/Recording Capabilities
- (3) Administration Building
- (4) Glass House
- (5) Bleacher Enclosure
- (6) Mess Area
- (7) Portable Latrines

e. SPECIAL INSTRUCTIONS:

(1) Range 4 Force on Force Shoot House is available for military organizations whose mission essential task list (METL) requires them to perform building clearance missions, and federal and civilian law enforcement agencies

(2) Range Restrictions:

(a) No indiscriminate firing, no burst firing with automatic weapons.

(b) Military units are authorized use of M9 pistol, M4 carbine, M16A2 and shotguns. No concussion or fragmentation grenades may be used. The M249 SAW, M60 or M240B **WILL NOT** be fired in the shoot house under any circumstances. Law enforcement agencies are authorized comparable weapons

(3) If an unsafe act is observed in the Shoot House an alarm can be activated from portable switches to stop training, an audible cease fire alarm will sound, and the overhead white lights will activate indicating cease fire. The unsafe act will be corrected before resuming training

(4) Range Planning

(a) A site visit is highly recommended prior to initiating planning in order to become familiar with the facility and aid in target placement planning. Site visits can be arranged by contacting the Firing Desk at 609-562-4600

(b) Range 4 requires the OIC in the grade of E-7 and above

(c) Units will have a Combat Life Saver (CLS), Basic Life Saving (BLS) for civilian agencies, with current qualifications, on standby at the control room with CLS bag. CLS personnel will perform lifesaving first aid measures until the range ambulance arrives for transport.

(d) When planning, remember to schedule time for walk through and dry fire exercises prior to conducting force on force training.

(e) Cleanup of the range will be conducted prior to releasing your organization; all brass will be policed, a vacuum is supplied to clean up all floors, a Safety Hazard of lead dust exists when using a broom to sweep under no circumstances will the floors be swept in a force-on-force shoot-house.

(f) Ensure everyone entering the shoot house is in proper uniform.

(1.) A Kevlar/ACH

(2.) Approved ballistic eye protection

(3.) Hearing protection

(4.) Individual Body Armor (IBA), with SAPI plates, must be worn in the force-on-force shoot house for all training. Ensure the body armor is in serviceable condition, fits the individuals properly.

(g) When weapons have previously been used for force-on-force training they have a tendency to develop a buildup of plastic and jams will occur, so all weapons will be cleaned prior to using facility.

(h) All weapons and personnel will be checked to ensure only authorized ammunition, weapons and equipment enters the facility for the current scenario. If any participants leave the area and return or new shooters arrive, they must be checked or rechecked. At no time will two types of ammunition or weapons be carried into the facility

(i) When lasers are used during any training all procedures outlined in ASAD Pam 350-3-chapter Q. will be adhered to

(j) A guard will be posted at the fence to control access to the facility; no one will be allowed entry when clearing operations are under way

(k) Strict compliance with force-on-force shoot-house instruction is mandatory; failure to comply will be reason for immediate removal from facility and denial of use in the future

f. CONFLICTS:

Figure E-20 Range 4 - Live Fire Exercise Shoot House (LFXSH) (SRTA, UTM, and Simunition only)

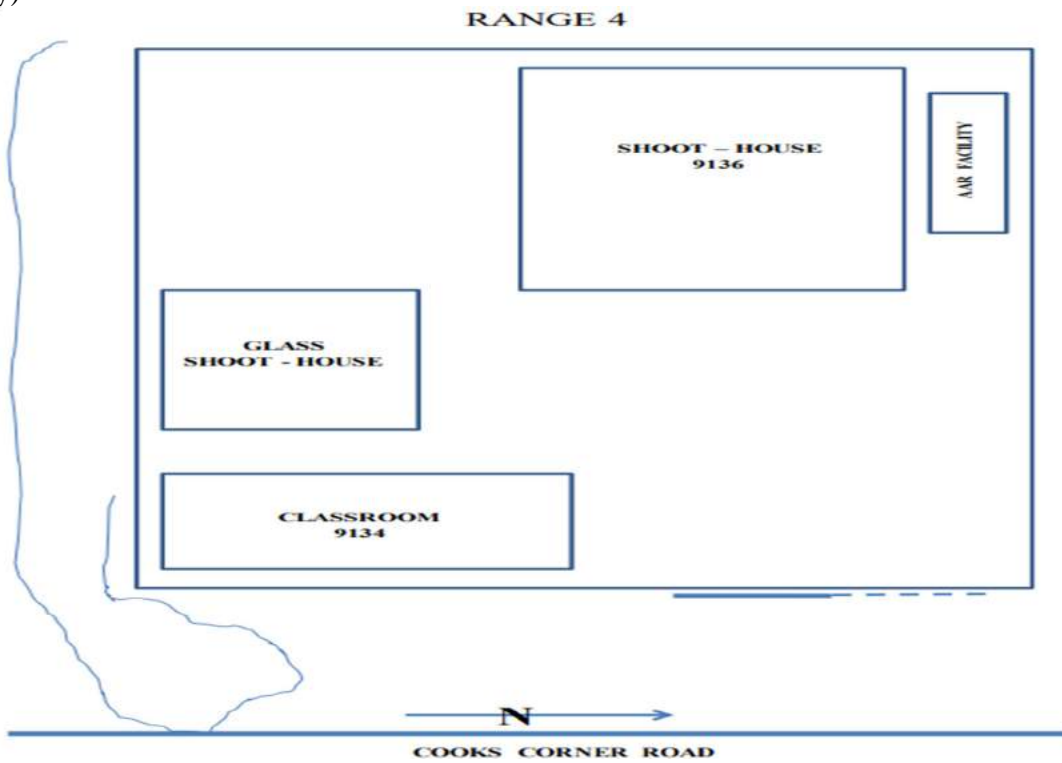


Figure E-21 Range 4 – (Interior)

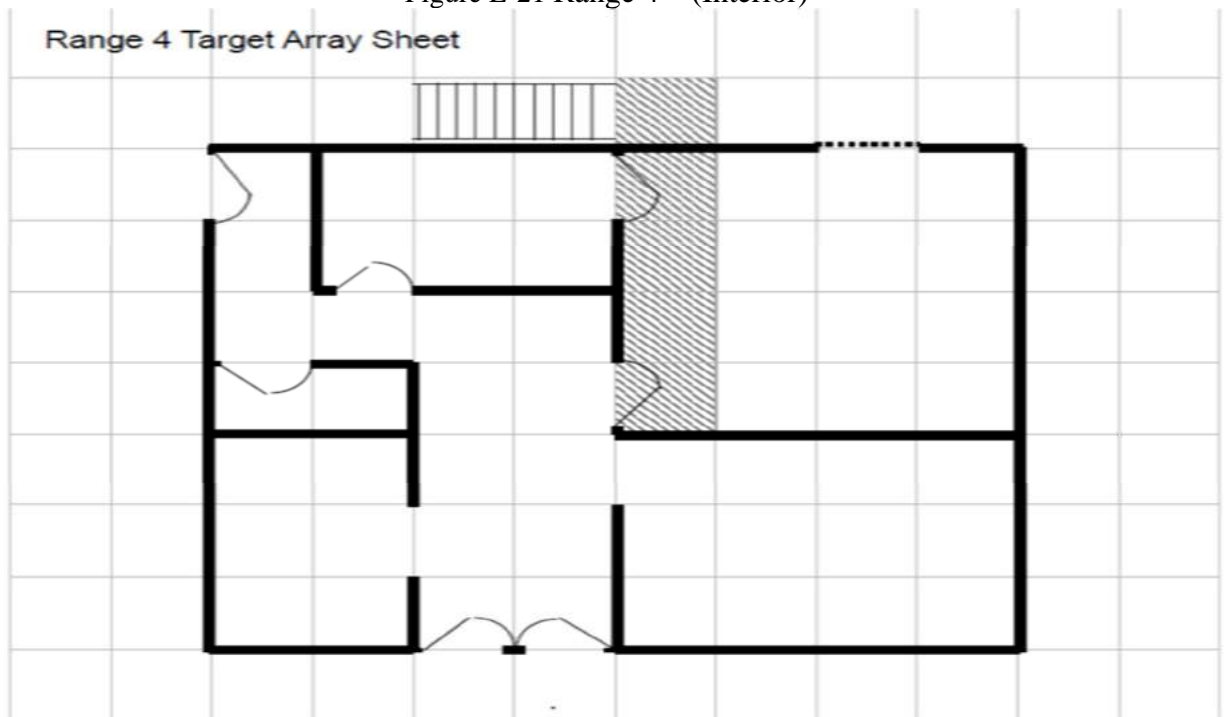




Table E-25. Range 6A – Combat Pistol Qualification Course (CPQC)

a. LOCATION: Located at coordinate WK387305, Map 1:50,000, DIXJMTTC 001, June 2006, 6.8 miles from ASA Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .9 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: Combat Pistol Qualification Course (CPQC), Tables V thru VI only
- (2) Alternate: None
- (3) Ammunition Capability: Standard Pistol

d. FACILITIES AVAILABLE:

- (1) Firing points: 12 Lanes
- (2) Control Tower Elevated with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Portable Latrines

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run



qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem

(2) Only range control personnel are authorized to maintain targets

(3) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R with a range support personnel.

f. CONFLICTS: Northwest Tank Trail

Figure E-22 Range 6A – Combat Pistol Qualification Course (CPQC)

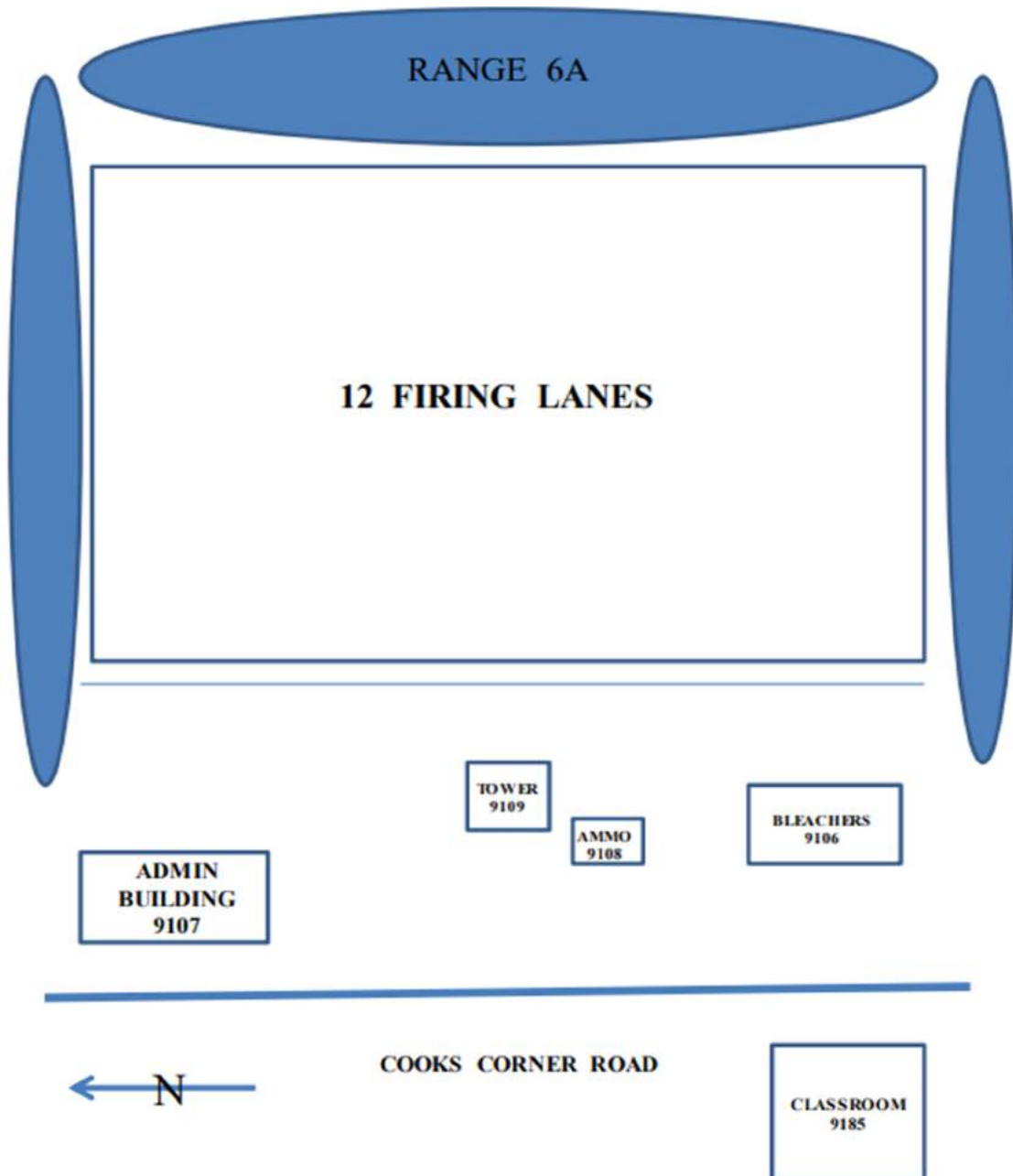




Table E-26. Range 6B – Combat Pistol Qualification Course (CPQC)

a. LOCATION: Located at coordinate WK387305, Map 1:50,000, DIXJMTTC 001, June 2006, 6.7 miles from ASA Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .8 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: LEWTAQ
- (2) Alternate: Pistol Grouping Exercise
- (3) Ammunition Capability: Standard Pistol, 5.56mm and shotgun

d. FACILITIES AVAILABLE:

- (1) Firing points: 12
- (2) Control Tower Elevated with Public Address System
- (3) Ammunition Issue Building
- (4) Administration Building
- (5) Bleacher Enclosure
- (6) Portable Latrines

e. SPECIAL INSTRUCTIONS:

(1) Request for targets to conduct pistol grouping exercise will be IAW reported personnel in RFMSS request, and they will be in the Ammunition Issue Building.

(2) Targets for LEWTAQ will be IAW reported personnel in RFMSS request, and they will be in the Ammunition Issue Building.

f. CONFLICTS: Northwest Tank Trail

Figure E-23 Range 6B - Combat Pistol Qualification Course (CPQC)

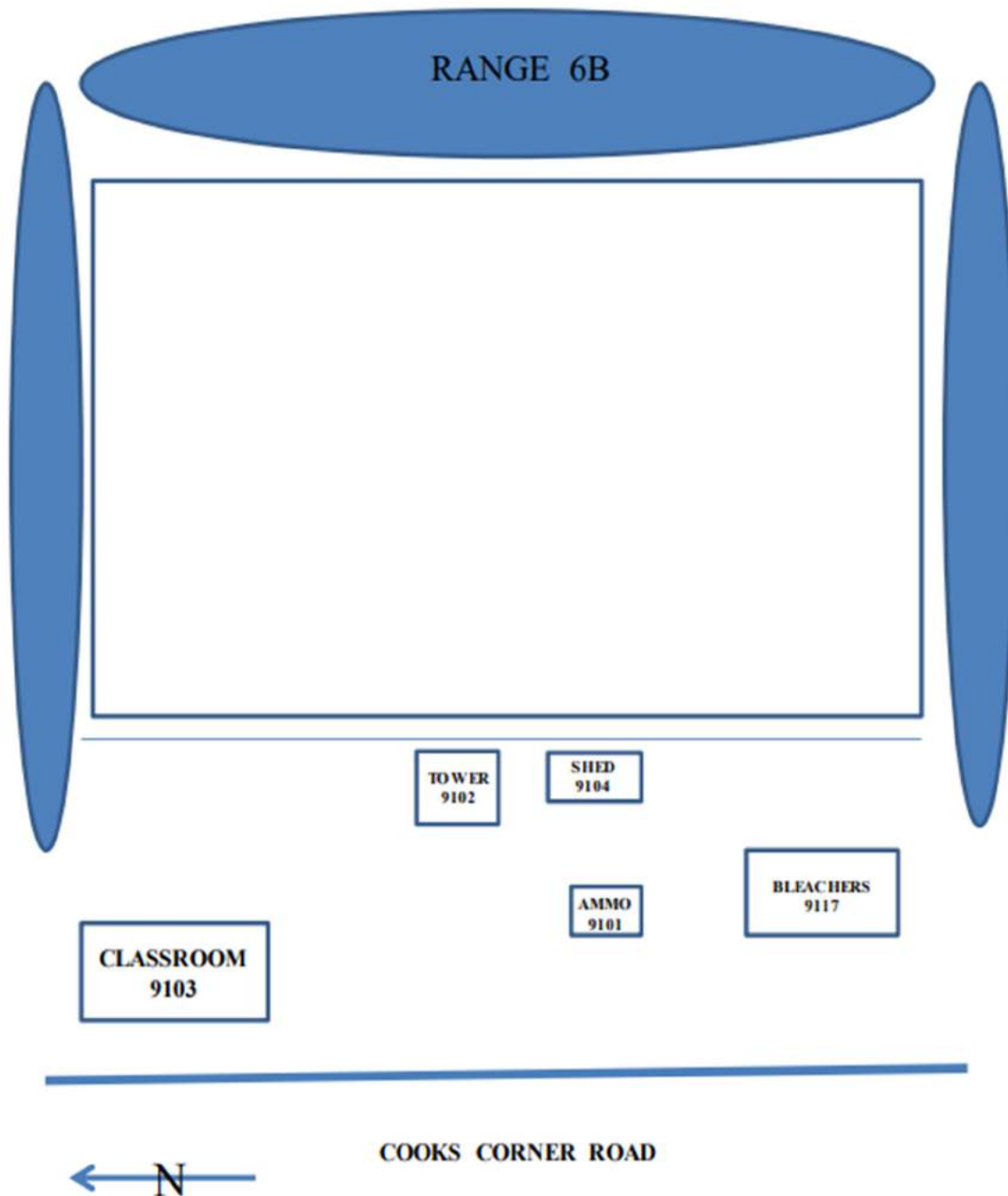






Table E-27. Range 7 – Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK386301, Map 1:50,000, DIXJMTTC 001, June 2006, 6.6 miles from ASA Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .6 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: Machine gun familiarization, the target array consists of tank hulls 200-800 meters down range; ten-meter machinegun zero
- (2) Alternate: None
- (3) Ammunition Capability: 5.56mm, 7.62mm, .50 cal, AT-4 sub-caliber and LAW sub-caliber.

d. FACILITIES AVAILABLE:

- (1) Firing points: Weapon Dependent
- (2) Control Tower Elevated
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Covered Mess
- (7) Latrines

e. SPECIAL INSTRUCTIONS:

- (1) Individuals will not proceed forward of the 25-meter target frame boots
- (2) When firing M2 .50 cal machinegun you may only fire between the limit markers to the far right on the firing line
- (2) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual
- (3) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon
- (4) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal
- (5) Targets for machinegun zero and 25 meter must be requested from range support operations

f. CONFLICTS: None

Figure E-24 Range 7 – Multipurpose Training Range (MPTR)

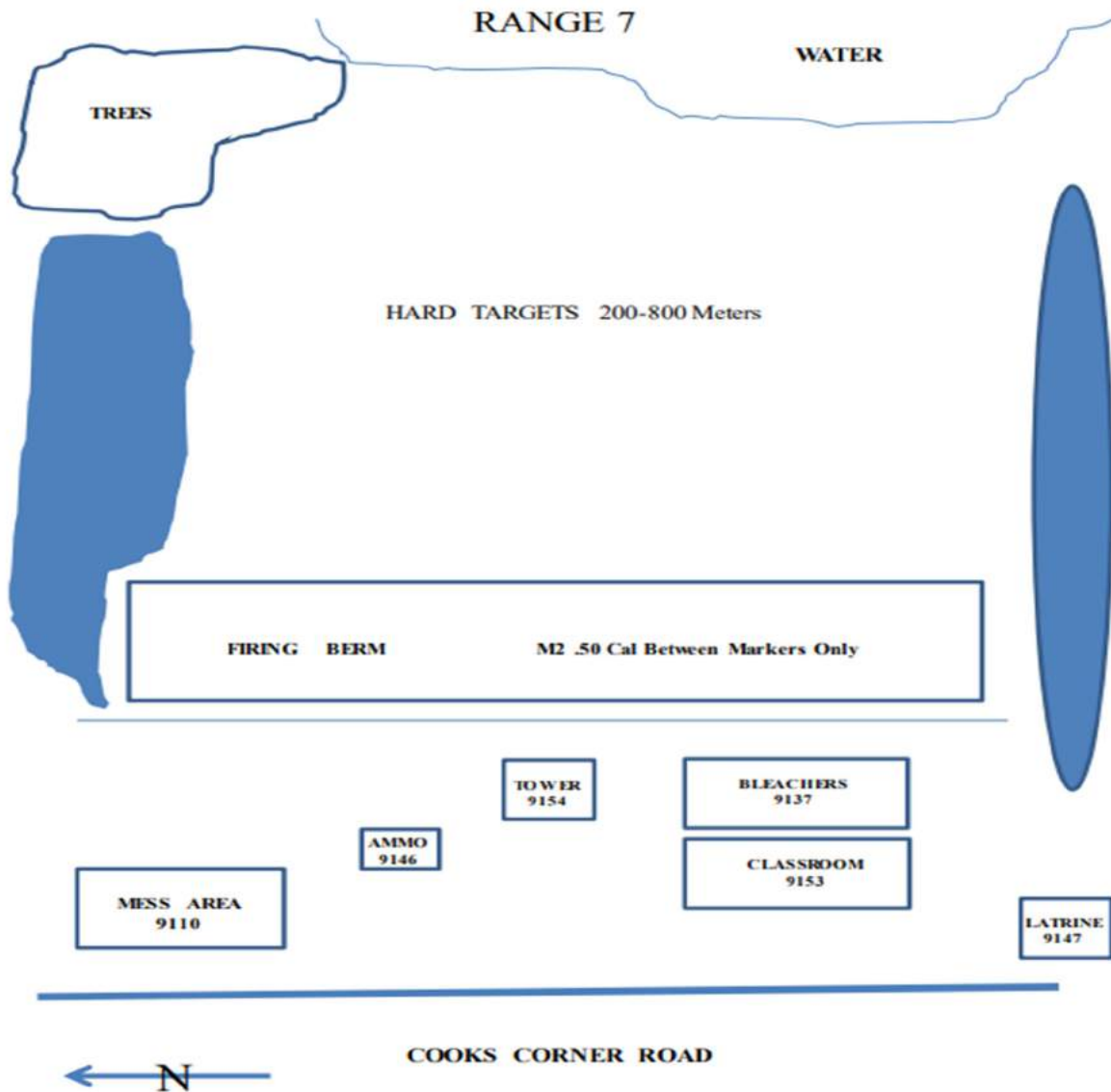




Table E-28. Range 8 – Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK386301, Map 1:50,000, DIXJMTTC 001, June 2006, 6.6 miles from ASA Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .5 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: 100 Meter Multi-Purpose Range
- (2) Alternate: Machinegun Zero Range
- (3) Ammunition Capability: Standard Pistol, Shotgun, 5.56, 7.62, .50 cal

d. FACILITIES AVAILABLE:

- (1) Firing points: 20 Multipurpose; 10 Machinegun Zero
- (2) Control Tower Elevated
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Covered Mess
- (6) Latrine

e. SPECIAL INSTRUCTIONS: Targets and Frames are ordered from Range Support Operations

f. CONFLICTS: None

Figure E-25 Range 8 – Multipurpose Training Range (MPTR)

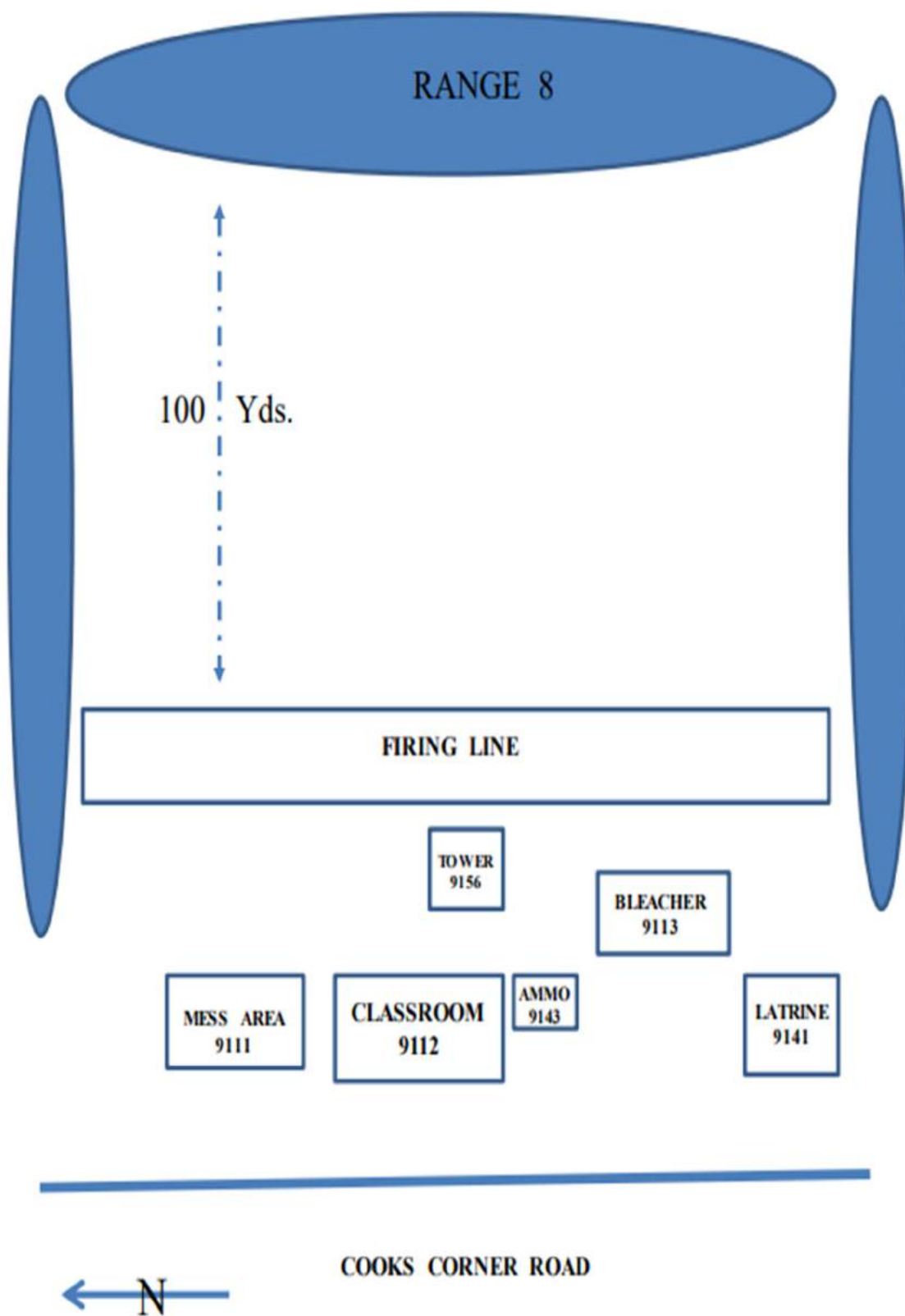






Table E-29. Range 9 – Grenade Launcher Range (GLR) (TPT only)

a. **LOCATION:** Located at coordinate WK386301, Map 1:50,000, DIXJMTC 001, June 2006, 5.8 miles from ASA Dix Headquarters on Cooks Corner Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .4 miles, the range is on the right

c. **CAPABILITIES:**

- (1) Primary: M203 Grenade Launcher Qualification Course
- (2) Alternate: None
- (3) Ammunition Capability: 40 mm Target Practice Ammunition (**ONLY**)

d. **FACILITIES AVAILABLE:**

- (1) Firing points: 4 each with Foxhole, Log Wall and Sand Bagged Positions
- (2) Control Tower Elevated
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Latrine

e. **SPECIAL INSTRUCTIONS:**

- (1) Target Practice ammunition only
- (2) Personnel will not go forward of the firing line
- (3) No cross-lane firing is permitted

- (4) Discontinue firing when ground winds exceed 30 mph
- (5) A minimum distance of 100 meters will be maintained between firing points and impact area

f. CONFLICTS: None

Figure E-26 Range 9 – Grenade Launcher Range (GLR) (TPT only)

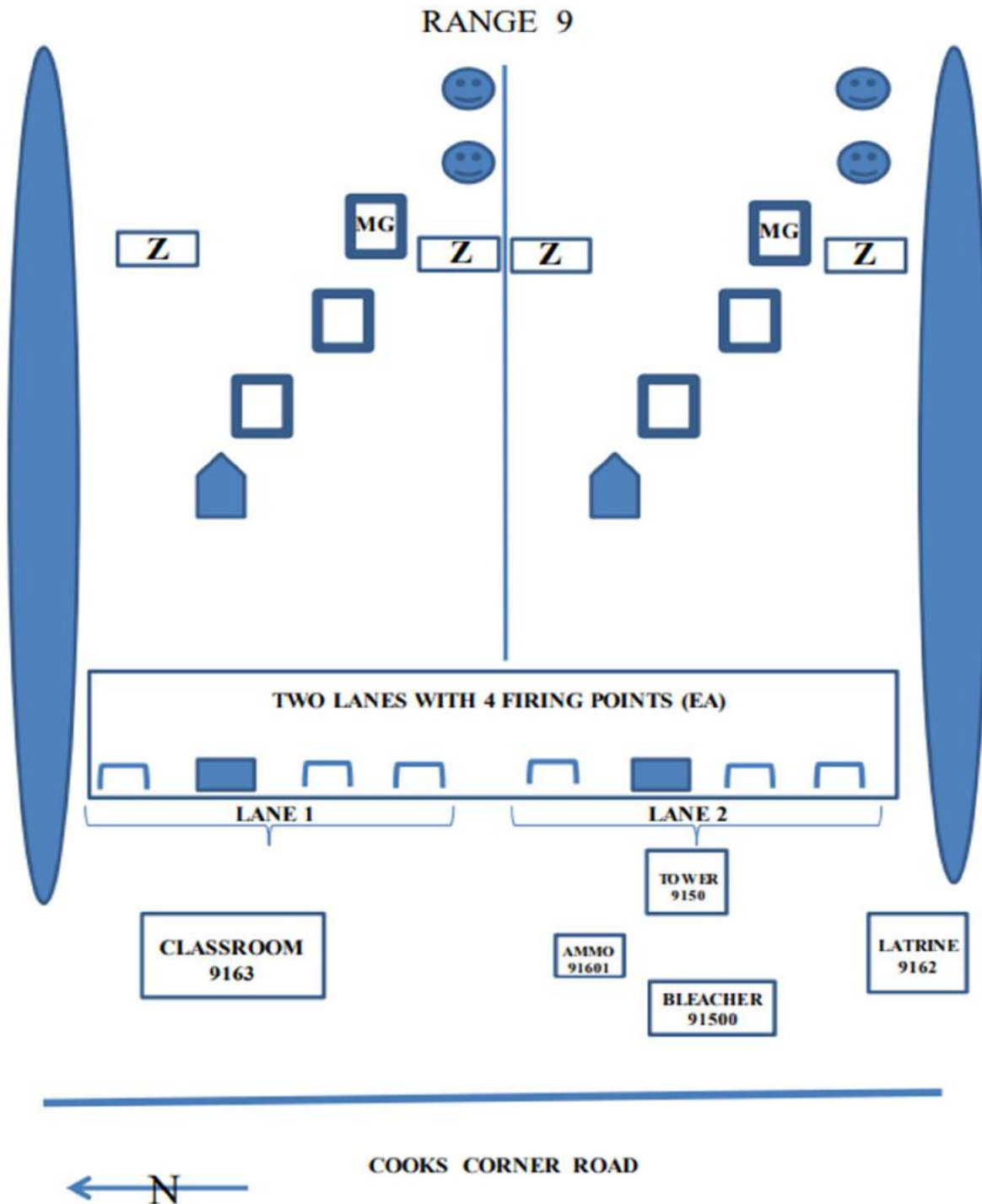




Table E-30. Range 10 – Basic 10M Firing Range (Zero)

a. LOCATION: Located at coordinate WK381294, Map 1:50,000, DIXJMTTC 001, June 2006, 5.5 miles from ASA Dix Headquarters on Cooks Corner Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1.1 miles. Turn east on Cooks Corner Road and continue for .2 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: Machinegun Zero Range
- (2) Alternate: None
- (3) Ammunition Capability: 5.56, 7.62 and .50 cal

d. FACILITIES AVAILABLE:

- (1) Firing points: 10 Lanes
- (2) Ammunition Issue Building
- (3) Bleacher Enclosure
- (4) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Assign one assistant instructor for every two (2) machineguns
- (2) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual

- (3) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon
- (4) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal
- (5) Weapons can be fired from both the tripod and ground mounts

f. CONFLICTS: Range 3B

Figure E-27 Range 10 – Basic 10M Firing Range (Zero)

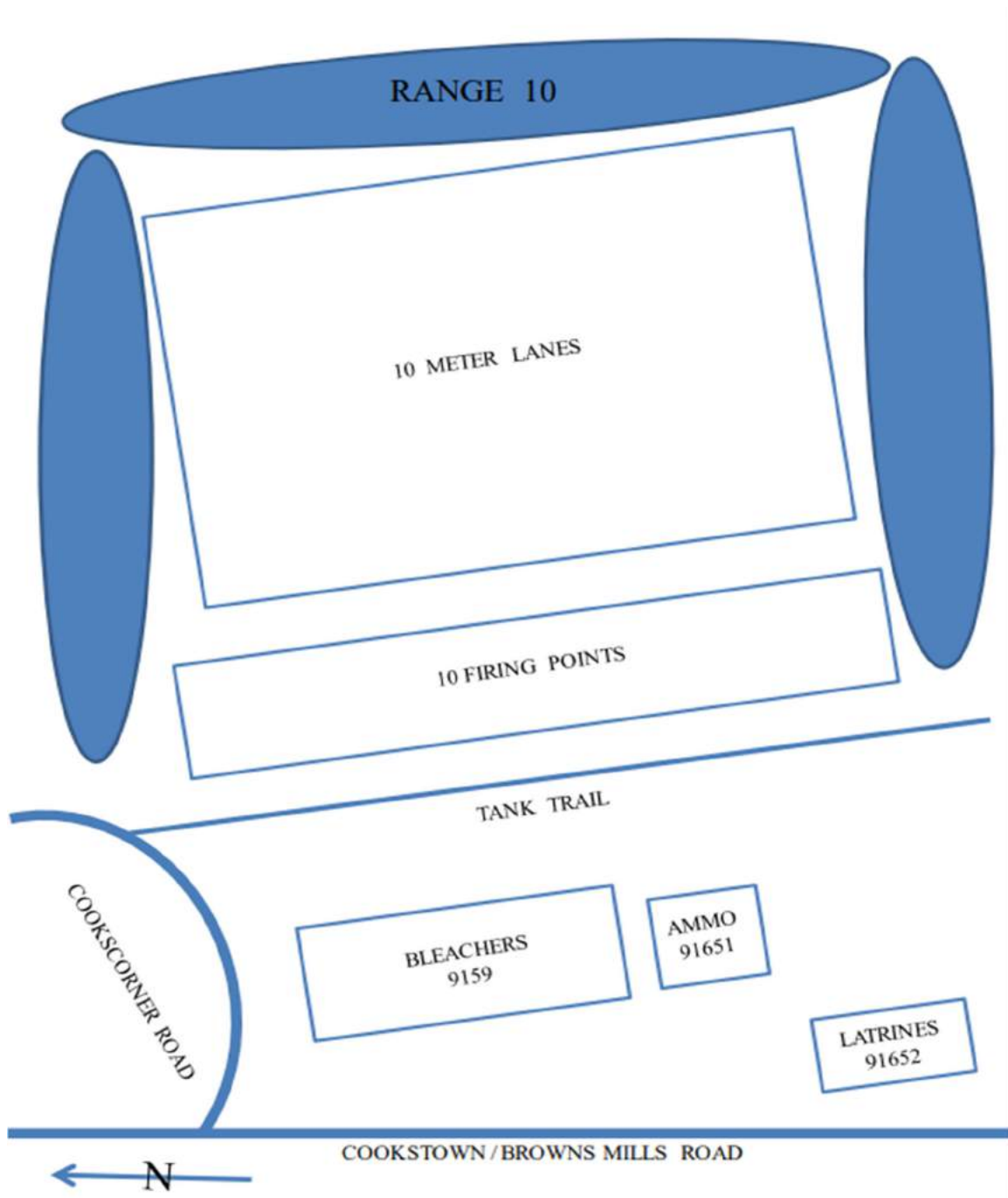






Table E-31. Range 11 – Automated Multipurpose Machine Gun Range (MPMG)

a. LOCATION: Located at coordinate WK381290, Map 1:50,000, DIXJMTTC 001, June 2006, 5.5 miles from ASA Dix Headquarters on Browns Mills/Cookstown Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for 1 mile entrance to the range is on the right

c. CAPABILITIES:

- (1) Primary: Automated Light / Medium Machinegun Qualification
- (2) Alternate: Machinegun Zero
- (3) Ammunition Capability: 5.56, 7.62

d. FACILITIES AVAILABLE:

- (1) Firing points:
  - (a) Qualification - 8 lanes
  - (b) Zero - 6 lanes
- (2) Control Tower Elevated with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleachers
- (6) Latrine

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only range control personnel are authorized downrange to work on targets

(3) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual

(4) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon

(5) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal

(6) Weapons can be fired from foxholes with tripod and ground mounts and in vehicles with ring mounts

(7) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R with a range support personnel.

f. CONFLICTS: None

Figure E-28 Range 11 – Automated Multipurpose Machine Gun Range (MPMG)

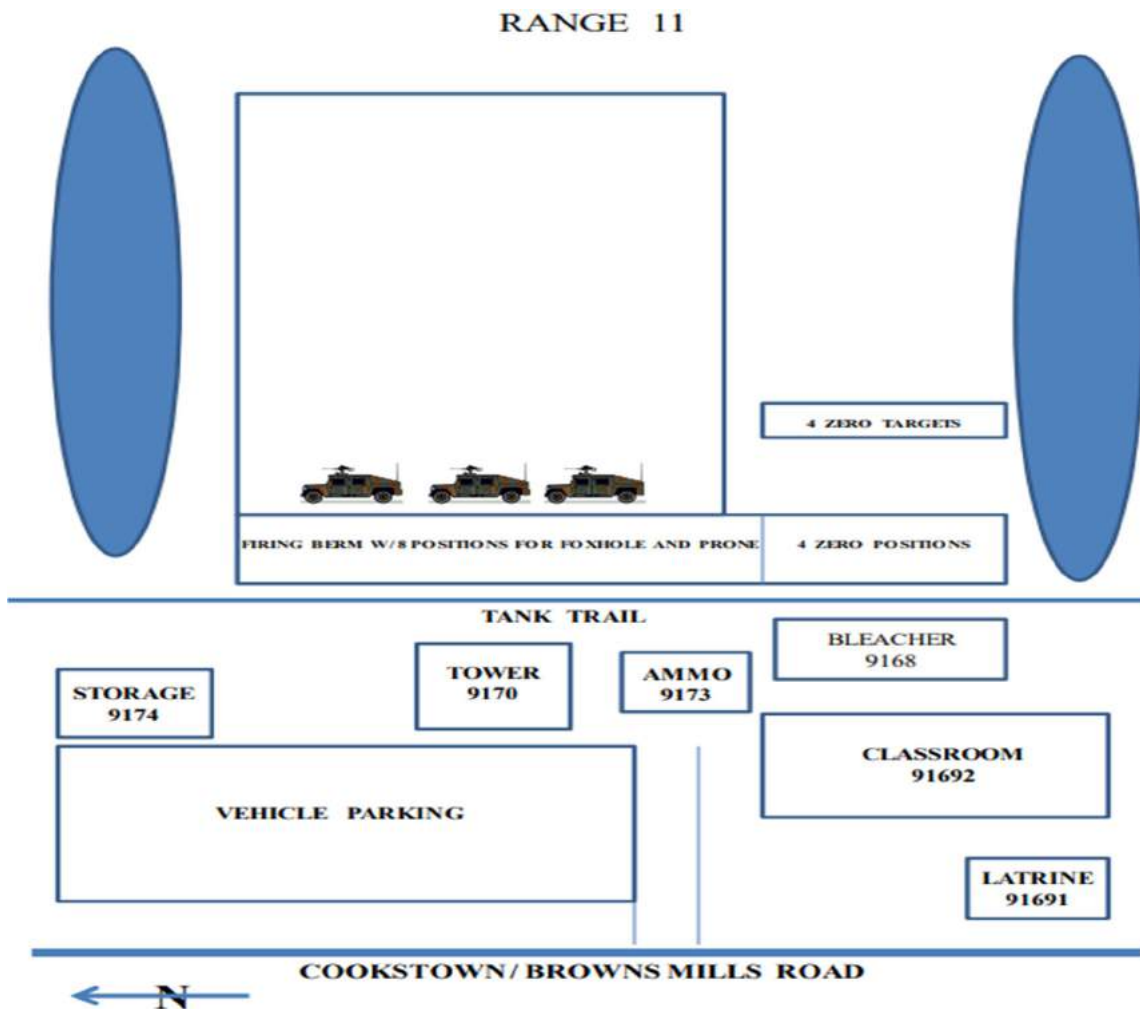




Table E-32. Range 12 – Non-standard Urban Operations Training Site (Small)

a. **LOCATION:** Located at coordinate WK377289, Map 1:50,000, DIXJMTTC 001, June 2006, 5.5 miles from ASA Dix Headquarters on Browns Mills/Cookstown Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for .8 miles, the range is on the left

c. **CAPABILITIES:**

(1) Primary: Military Operations in Urban Terrain (MOUT) training. The range is equipped with eleven wooden buildings

(2) Alternate: Battalion and Company command post site for CPX / Staff exercises.

(3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions

d. **FACILITIES AVAILABLE:**

(1) Buildings

(a) Two Story - 6

(b) One Story - 2

(c) Façade - 2

(2) Classroom

(3) Landing Zone

(4) Covered Mess

(5) Portable Latrines

(6) Electricity with Exterior Lighting

e. SPECIAL INSTRUCTIONS:

- (1) Units will provide fire extinguishers for use while using any pyrotechnics
- (2) No smoke or exploding pyrotechnics will be utilized inside any structure on the range
- (3) If smoke is used it will be utilized in such a manner as to not obscure Cookstown/Browns Mills Road or Hanover Road
- (4) Guards will be posted 500 meters on either side of Cookstown/Browns Mills Road during smoke operations when there is a possibility it may obscure drivers' vision to provide warning to motorist.
- (5) Use of CS is forbidden
- (6) No aerial flares are authorized for use
- (7) During force on force training the safety officer will ensure appropriate protective clothing and equipment is worn by all participants on the site. Personnel will be inspected to ensure no ball ammunition is on site
- (8) Incendiary devices will not be utilized within 25 meters of any structure
- (9) Units utilizing simunitions are responsible for removing any paint residue on any structure

f. CONFLICTS: Cookstown/Browns Mills Road; ASP Road

Figure E-29 Range 12 – Non-standard Urban Operations Training Site (Small)

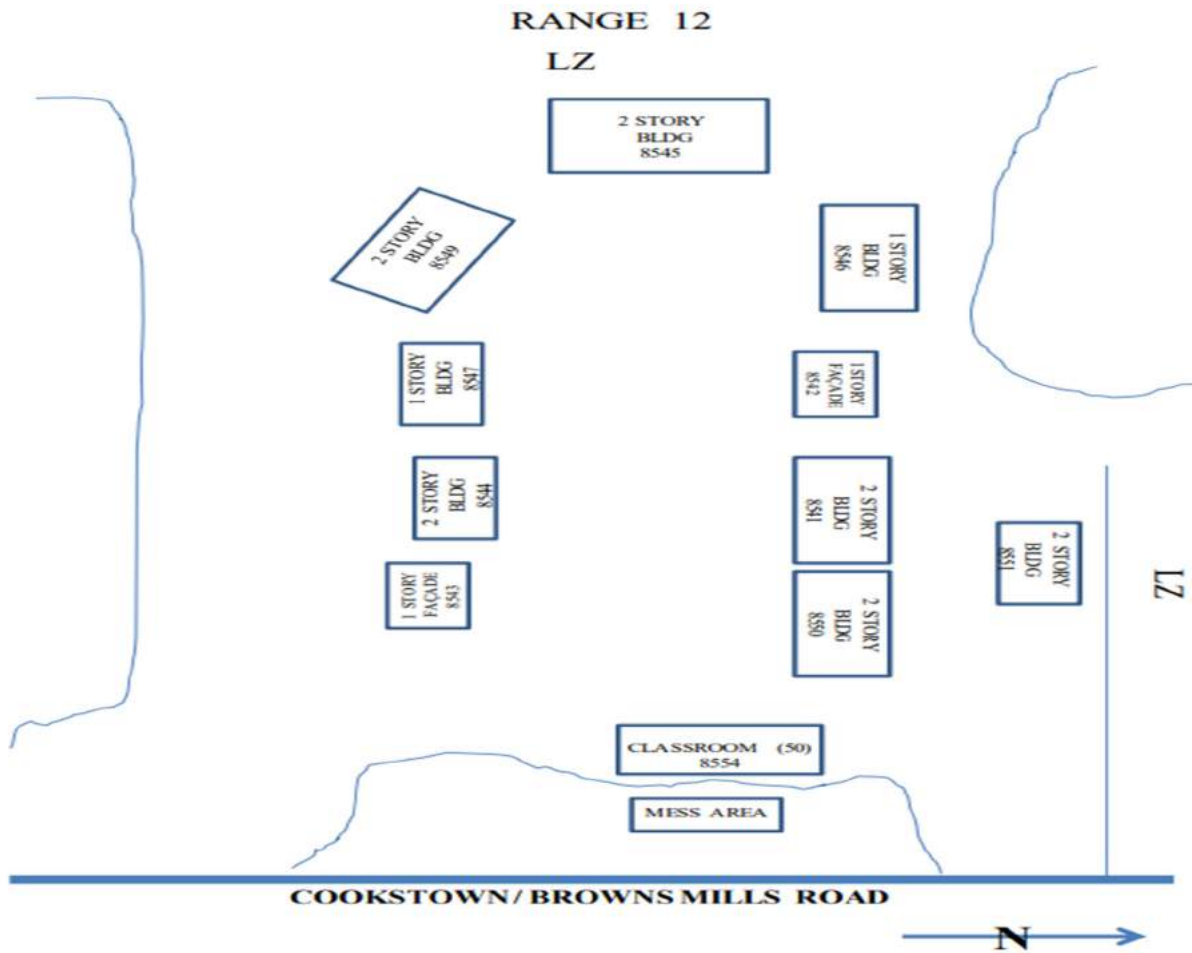






Table E-33. Range 13 – Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK381286, Map 1:50,000, DIXJMTTC 001, June 2006, 5.3 miles from ASA Dix Headquarters on Browns Mills/Cookstown Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.2 miles. Turn north on Browns Mills/Cookstown Road for .8 miles, the range is on the right

c. CAPABILITIES:

- (1) Primary: Lease to the FBI
- (2) Alternate: None
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE: N/A

e. SPECIAL INSTRUCTIONS: This range is leased to the Federal Bureau of Investigation.

f. CONFLICTS: None



Table E-34. Range 14 - Morale Welfare and Recreation (MWR) Range

a. LOCATION: Located at coordinate WK388279, Map 1:50,000, DIXJMTTC 001, June 2006, 5.8 miles from ASA Headquarters on South Range Road Extension

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 2.2 miles. Turn north onto Browns Mills/Cookstown Road for .6 miles. Range entrance is on the right

c. CAPABILITIES:

(1) Primary: Recreation Services trap range, rifle range, pistol range, shotgun, archery range, field archery range, tomahawk range and paint ball course

(2) Alternate: None

(3) Ammunition Capability: .22, .38, .308, .357, .45, .50 cal (muzzle loader), 9mm, 10mm, 5.56mm, 7.62mm, shotgun and paintball

d. FACILITIES AVAILABLE:

(1) Firing Points:

(a) Rifle; 14

(b) Pistol; 9

(c) Trap fields: 4

(d) Skeet fields; 10

(e) Field/Target Archery; 8

(f) Shotgun; 80

(2) Elevated Tower

(3) Rod & Gun Club House (Registration)

- (4) Latrine
- (5) Picnic Area
- (6) Trailer/Camper Hook Ups

e. SPECIAL INSTRUCTIONS:

- (1) Operating Hours:
  - (a) Wednesday; 1300 - 2000
  - (b) Friday; 1300 - 2000 (December - April)
  - (c) Saturday and Sunday 0800 - 1600
- (2) Prior to conducting live fire, all individuals will be briefed on the safe conduct of the range.
- (3) When not in use rifles will be placed in racks with the bolt open and the safety engaged.
- (4) An outdoor recreation branch representative acts as the Officer in Charge (OIC) and Range Safety Officer (RSO) and will strictly regulate the times of live fire and cease fire for the range complex.
- (5) Non-Standard ammunition is authorized for use on this range
- (6) Personnel discharging weapons when the range is not open may be charged with trespassing and illegal discharge of firearms

f. CONFLICTS: The first two positions of the skeet range interfere with the safe movement of traffic on the tank trail; when position 1 and 2 are to be used coordination with range control to place barricades and divert traffic on the tank trail must be made

Figure E-30 Range 14 - Morale Welfare and Recreation (MWR) Range

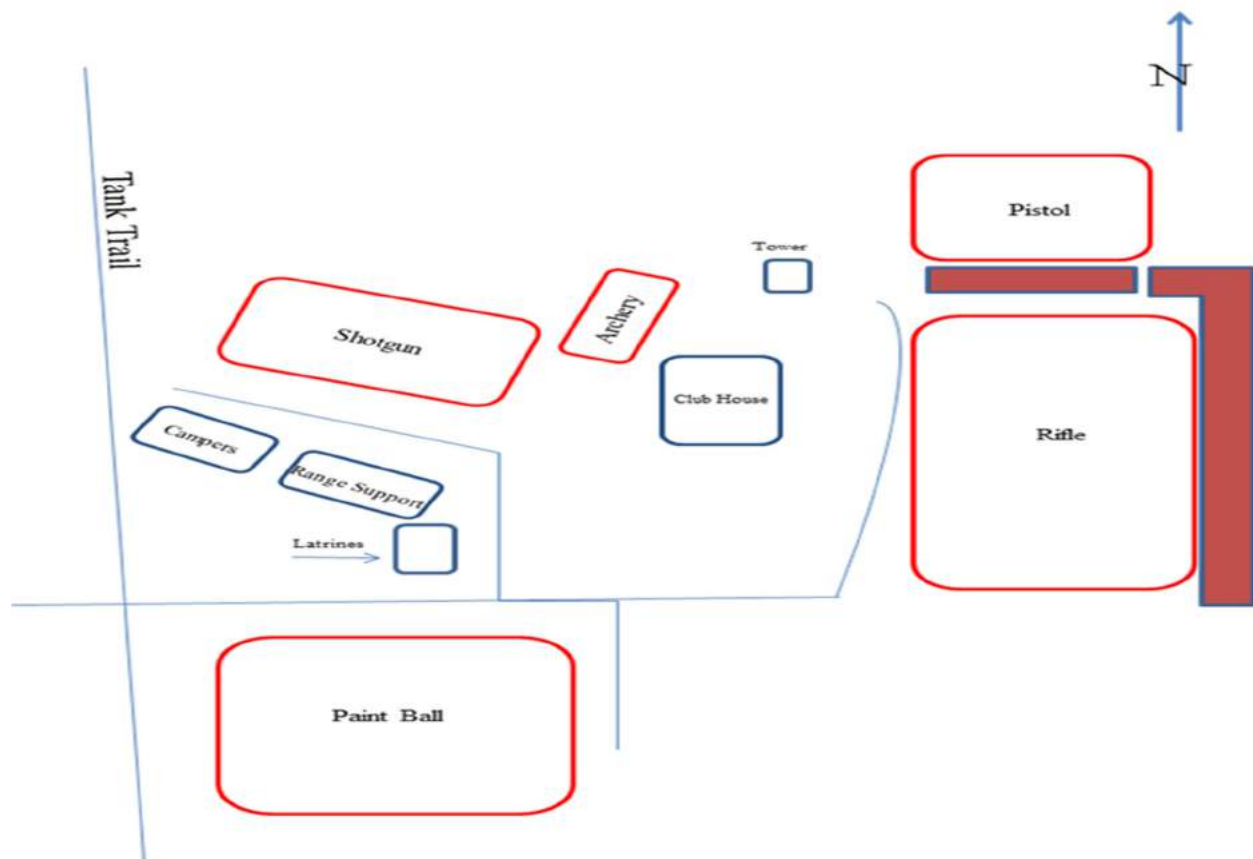




Table E-35. Range 15 – Known Distance Range (KD)

a. **LOCATION:** Located at coordinate WK388275, Map 1:50,000, DIXJMTTC 001, June 2006, 5.4 miles from ASA Dix Headquarters on South Range Road Extension

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 2.3 miles. Turn north on Tank Trail for .5 miles, the range is on your right

c. **CAPABILITIES:**

(1) Primary: Marine Corps rifle qualification on a Known Distance Range with firing lines arrayed at 100, 200, 300, 400, 500 and 600 yards from the targets

(2) Alternate: Squad designated marksmanship training

(3) Ammunition Capability: 5.56mm and 7.62mm

d. **FACILITIES AVAILABLE:**

(1) Firing Points:

(2) Ammunition Issue Building

(3) Classroom

(4) Bleacher Enclosure

(5) Latrines: 2

(6) Covered Mess



e. SPECIAL INSTRUCTIONS:

- (1) Pit personnel cannot leave the shelter of the pits during firing
- (2) Personnel working in the pit during live fire will wear Combat Helmet, Eye Protection and Individual Body Armor with SAPI plates
- (3) Vehicles are not allowed in the pits during live fire exercises
- (4) No armor piercing ammunition is authorized
- (5) One Administrative Vehicle is authorized down range on the firing line during any firing

f. CONFLICTS: None

Figure E-31 Range 15 – Known Distance Range (KD)

**(UNDER CONSTRUCTION)**



Table E-36. Range 16 – Automated Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK390272, Map 1:50,000, DIXJMTTC 001, June 2006, 5.4 miles from ASA Dix Headquarters on South Range Road Extension

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.4 miles. Turn north .1 miles; the range is on your right across from Range Control Headquarters

c. CAPABILITIES:

- (1) Primary: Field Fire
- (2) Alternate: None
- (3) Ammunition Capability: 5.56 and 7.62

d. FACILITIES AVAILABLE:

- (1) Firing Points: 16
- (2) Elevated Control Tower with Installed Public Address System
- (3) Classroom
- (4) Bleacher Enclosure
- (5) Ammunition Issue Building
- (6) Latrine
- (7) Covered Mess

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control personnel are authorized downrange

(3) Flood lights on is the automatic signal for cease fire

(4) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R with a range support personnel.

f. CONFLICTS: None

Figure E-32 Range 16 – Automated Multipurpose Training Range (MPTR)

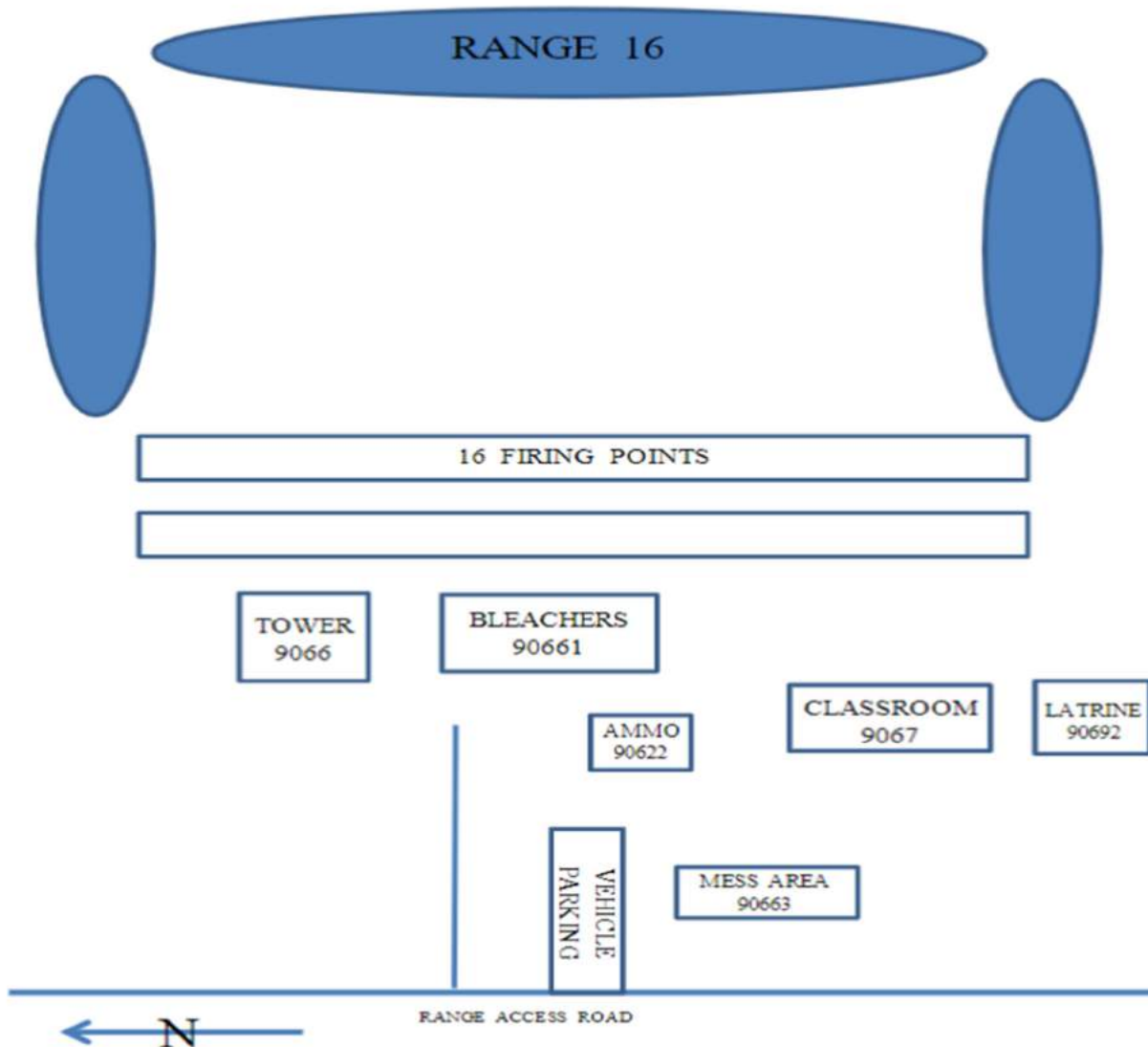




Table E-37. Range 17 – Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK390628, Map 1:50,000, DIXJMTTC 001, June 2006, 5.0 miles from ASA Dix Headquarters on South Range Road Extension.

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.5 miles, the range is on your left.

c. CAPABILITIES:

- (1) Primary: 25 Meter Multipurpose facility for pistol and rifle training.
- (2) Alternate: None.
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE: N/A

e. SPECIAL INSTRUCTIONS: This range is leased to the Federal Bureau of Investigation.

f. CONFLICTS: None





Table E-38. Range 18A – Basic 10M-25M Firing Range (Zero)

a. **LOCATION:** Located at coordinate WK391266, Map 1:50,000, DIXJMTTC 001, June 2006, 5.2 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue then turn east on Range Road for 2.6 miles, the range is on your left

c. **CAPABILITIES:**

- (1) Primary: Army Standard 25-meter Rifle Zero and Alternate Qualification Course
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 50 firing points with concrete fighting positions
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine
- (7) Covered Mess

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone is in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-33 Range 18A – Basic 10M-25M Firing Range (Zero)

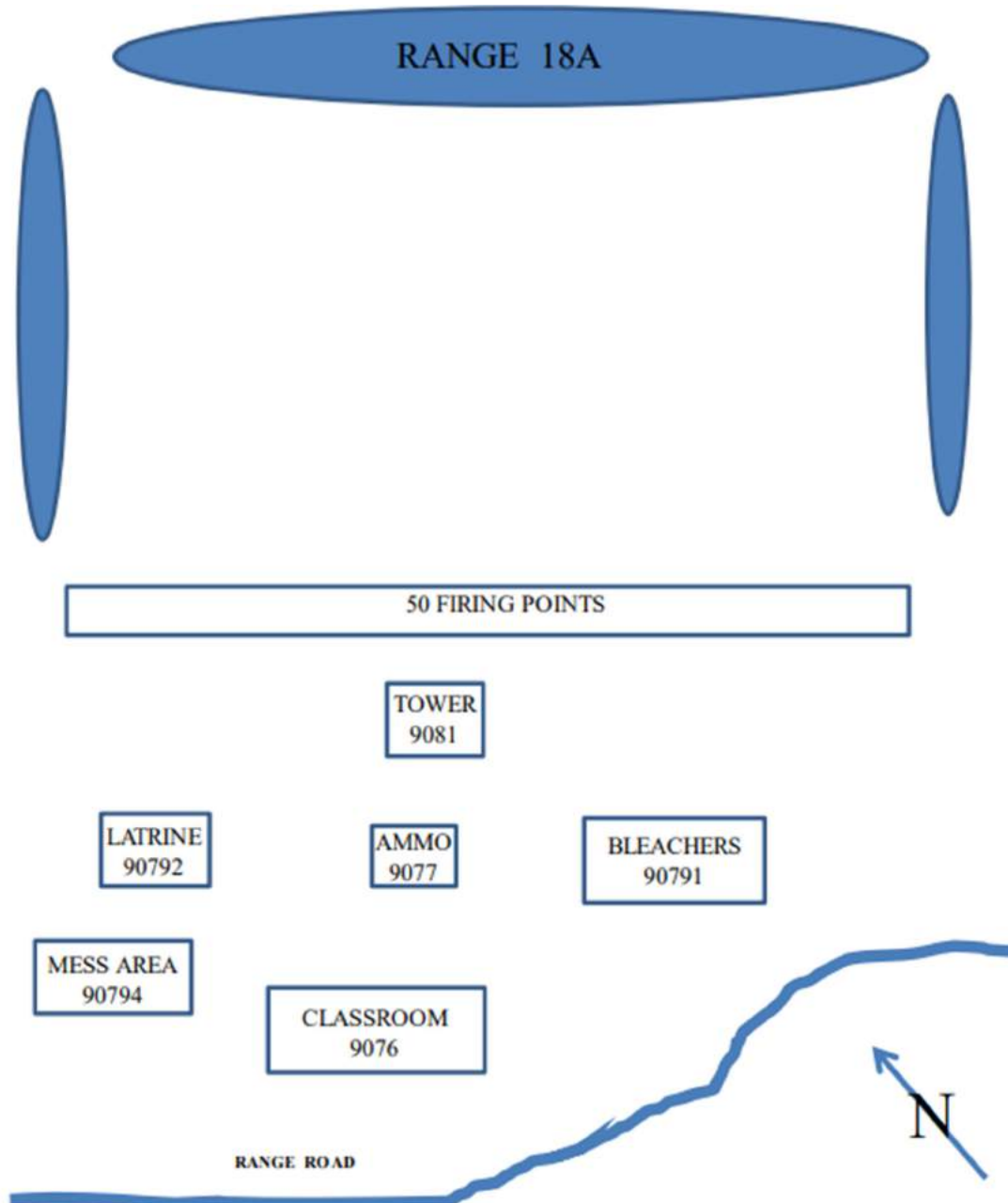




Table E-39. Range 18B – Basic 10M-25M Firing Range (Zero)

a. **LOCATION:** Located at coordinate WK391266, Map 1:50,000, DIXJMTTC 001, June 2006, 5.2 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue then turn east on Range Road for 2.6 miles, the range is on your left

c. **CAPABILITIES:**

- (1) Primary: Army Standard 25-meter Rifle Zero and Alternate Qualification Course
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 50 firing points with concrete fighting positions
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Bleacher Enclosure

e. **SPECIAL INSTRUCTIONS:**

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone is in call box on Range Tower or Telephone-Pole



f. CONFLICTS: None

Figure E-34 Range 18B – Basic 10M-25M Firing Range (Zero)

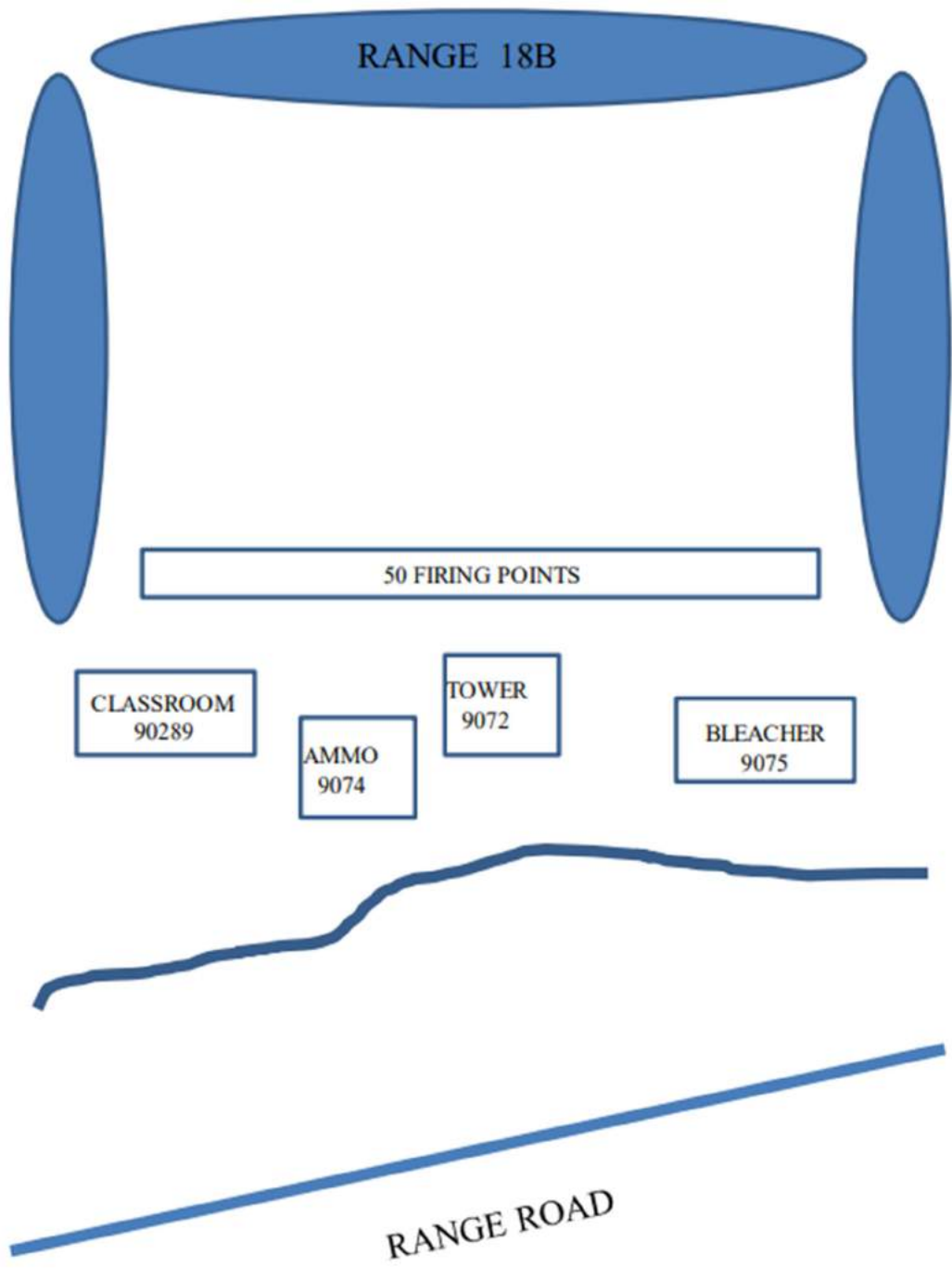






Table E-40. Range 19 – Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK394263, Map 1:50,000, DIXJMTTC 001, June 2006, 5.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.6 miles, the range is on your left

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 60 with concrete fighting positions
- (2) Elevated Control Tower with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine
- (7) Covered Mess

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames

(2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders

(3) Telephone located in call box on Range Tower or Telephone-Pole

(4) Firing times are restricted to 0730-1800 hours daily

f. CONFLICTS: None

Figure E-35 Range 19 – Basic 10M-25M Firing Range (Zero)

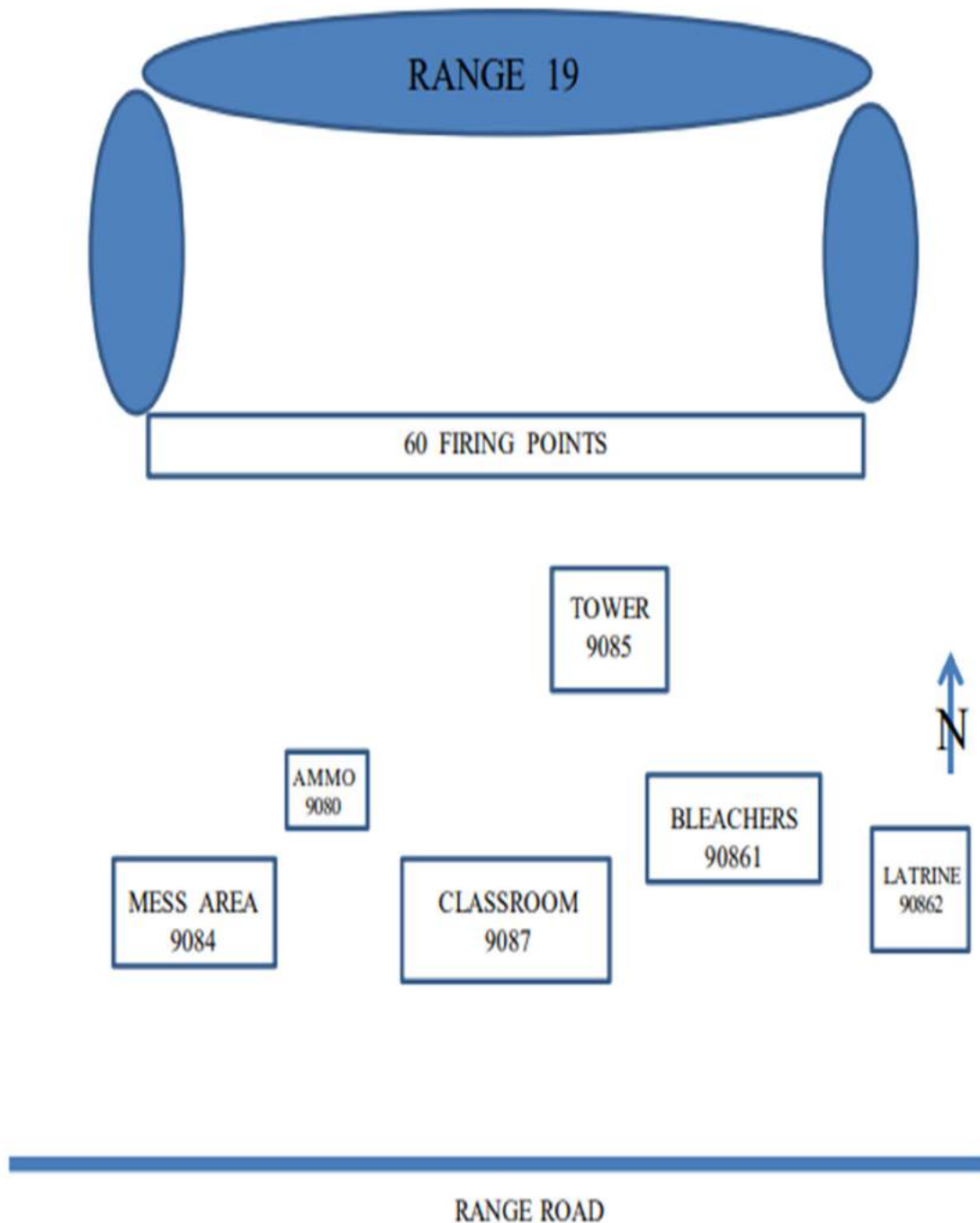




Table E-41. Range 20 – Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK396263, Map 1:50,000, DIXJMTTC 001, June 2006, 5.7 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 2.7 miles, the range is on your left

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 60 with concrete fighting positions
- (2) Elevated Control Tower with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine
- (7) Covered Mess

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames

(2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders

(3) Telephone located in call box on Range Tower or Telephone-Pole

(4) Firing times are restricted to 0730-1800 hours daily

f. CONFLICTS: None

Figure E-36 Range 20- Basic 10M-25M Firing Range (Zero)

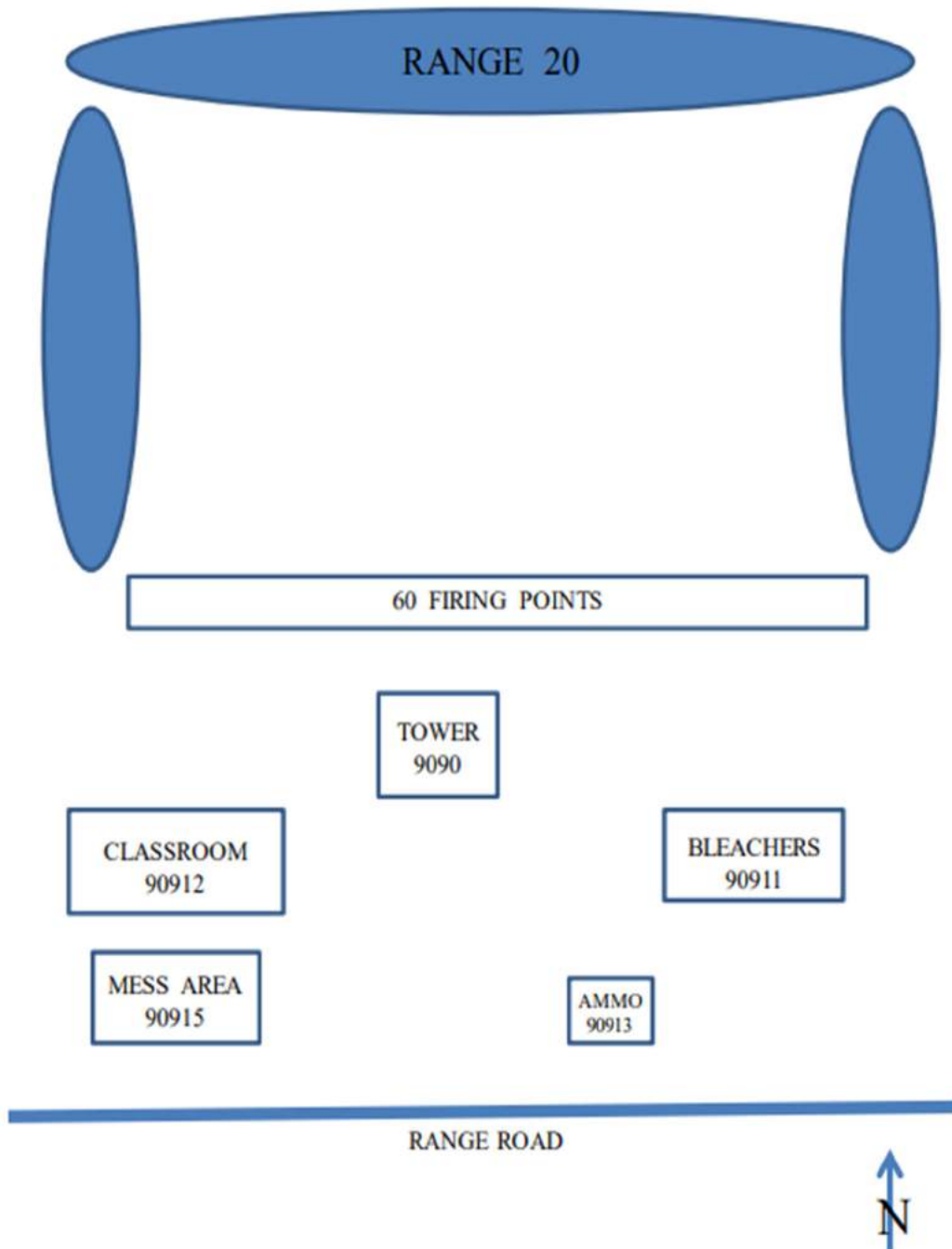






Table E-42. Range 21 – Automated Record Fire Range (ARF)

a. **LOCATION:** Located at coordinate WK398263, Map 1:50,000, DIXJMTTC 001, June 2006, 5.8 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 2.8 miles, the range is on your left.

c. **CAPABILITIES:**

(1) Primary: Automated Record Fire Range with target distances of 50, 100, 150, 200, 250, 300 and 400 meters.

(2) Alternate: M249 SAW Qualification and NBC Qualification

(3) Ammunition Capability: 5.56

d. **FACILITIES AVAILABLE:**

(1) Firing Points: 8 with barricades

(2) Elevated Control Tower with Public Address System.

(3) Ammunition Issue Building

(4) Classroom

(5) Bleacher Enclosure

(6) Latrine

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control maintenance personnel are authorized to repair targets.

(3) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon.

(4) Scenarios for the range are coordinated during the Final Coordination Meeting.

(5) Firing times are restricted to 0730-1800 hours daily.

(6) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS: None

Figure E-37 Range 21- Automated Record Fire Range (ARF)

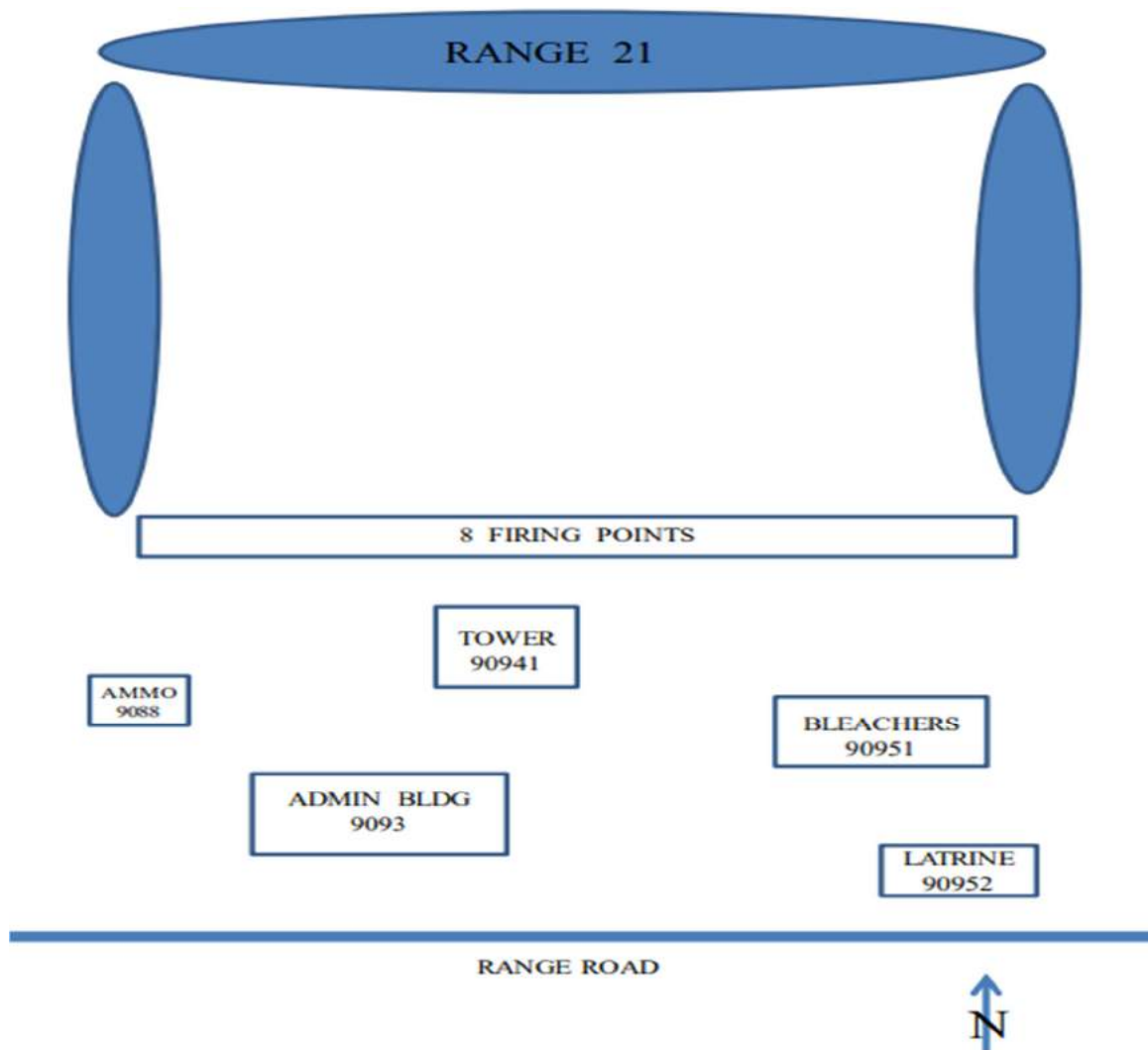




Table E-43. Range 22 – Basic 10M-25M Firing Range (Zero)

a. **LOCATION:** Located at coordinate WK399262, Map 1:50,000, DIXJMTTC 001, June 2006, 5.9 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 2.9 miles, the range is on your left

c. **CAPABILITIES:**

- (1) Primary: Army Standard 25-meter Rifle Zero and Alternate Qualification Course
- (2) Alternate: Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 35 with concrete fighting positions
- (2) Elevated Control Tower with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom (2)
- (5) Bleacher Enclosure
- (7) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole
- (4) Firing times are restricted to 0730-1800 hours daily

f. CONFLICTS: None

Figure E-38 Range 22 – Basic 10M-25M Firing Range (Zero)

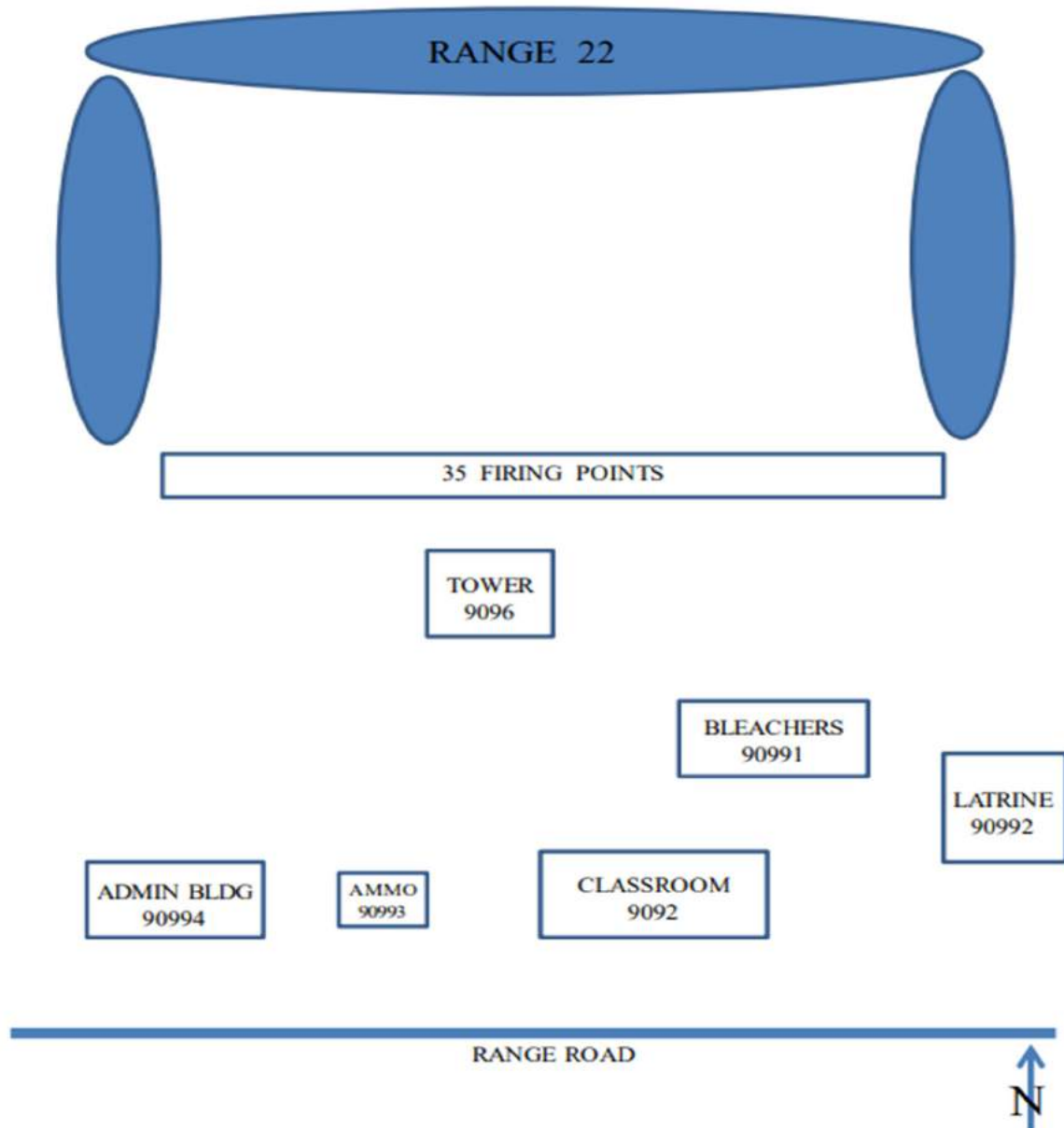






Table E-44. Range 23 – Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK401262, Map 1:50,000, DIXJMTTC 001, June 2006, 6.1 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 3.0 miles, the range is on your left

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 35 with concrete fighting positions
- (2) Elevated Control Tower with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Covered Mess
- (7) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole
- (4) Firing times are restricted to 0730-1800 hours daily

f. CONFLICTS: None

Figure E-39 Range 23 – Basic 10M-25M Firing Range (Zero)

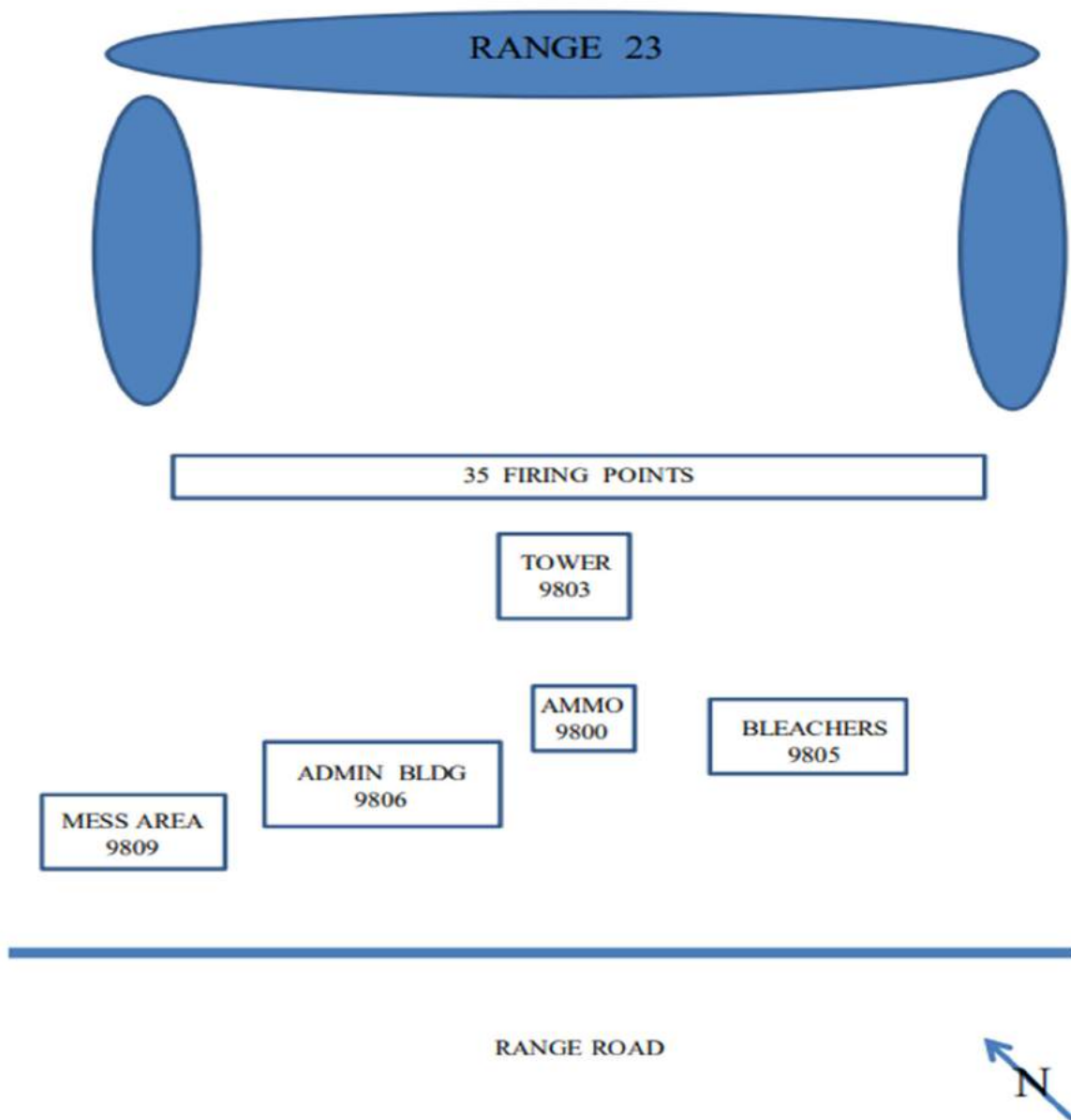




Table E-45. Range 24 - Basic 10M-25M Firing Range (Zero)

a. **LOCATION:** Located at coordinate WK401262, Map 1:50,000, DIXJMTTC 001, June 2006, 6.1 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 3.0 miles, the range is on your left.

c. **CAPABILITIES:**

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 35 with concrete fighting positions.
- (2) Elevated Control Tower with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Covered Mess
- (7) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames.
- (2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders.
- (3) Telephone located in call box on Range Tower or Telephone-Pole.
- (4) Firing times are restricted to 0730-1800 hours daily.

f. CONFLICTS: None

Figure E-40 Range 24 - Basic 10M-25M Firing Range (Zero)

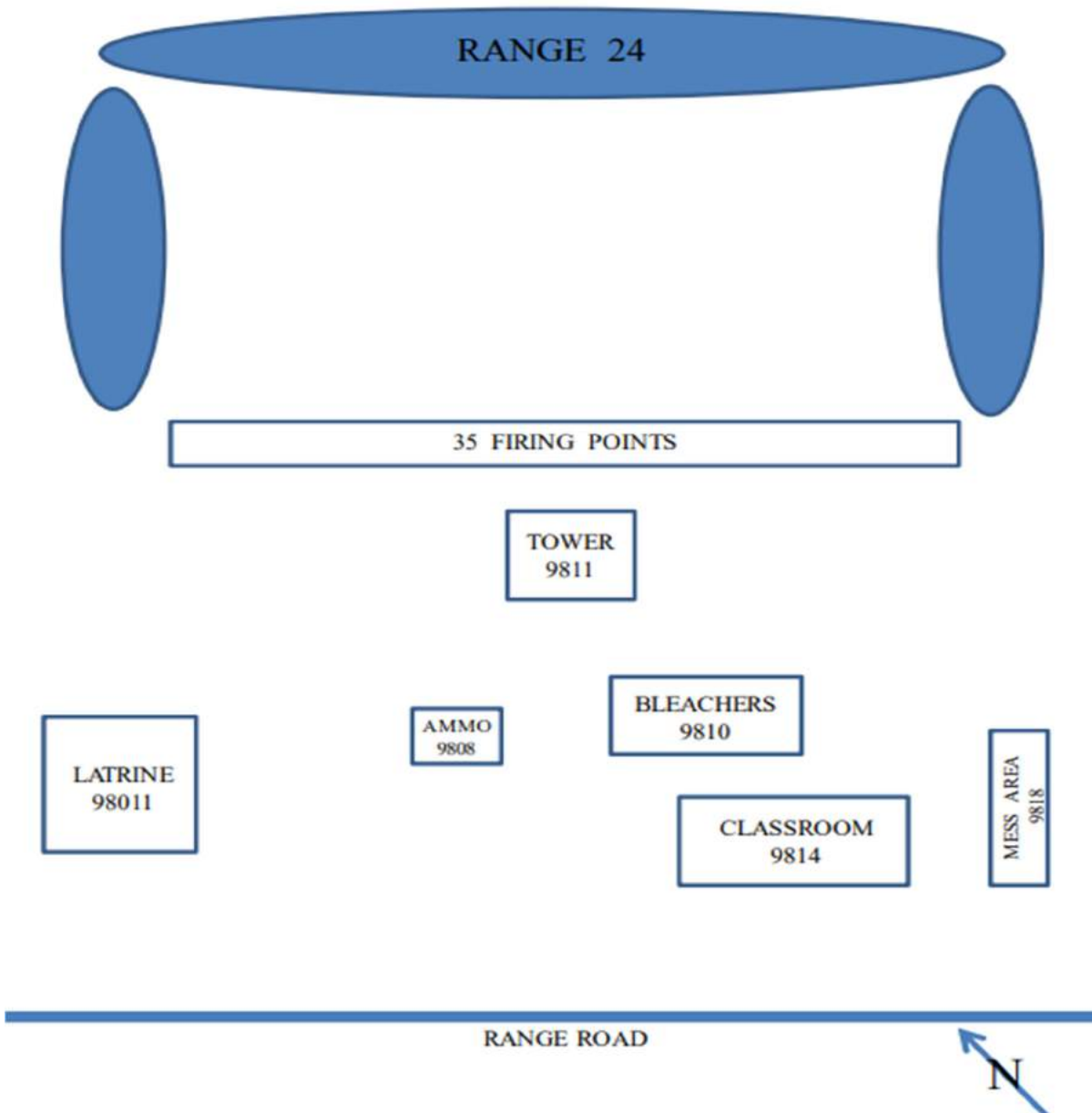






Table E-46. Range 25 - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK401262, Map 1:50,000, DIXJMTTC 001, June 2006, 7.4 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .6 miles range is on your right.

c. CAPABILITIES:

- (1) Primary: Air Force 7-to-25-meter Pistol and Rifle Course
- (2) Alternate: Army Standard 25-meter Rifle Zero and Shotgun Familiarization; Advanced Rifle Marksmanship.
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun.

d. FACILITIES AVAILABLE:

- (1) Firing Points: 49 Covered Firing Points
- (2) Control Booth
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Covered Mess

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames.
- (2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders.
- (3) Telephone located in call box on Range Tower or Telephone-Pole.

f. CONFLICTS: None

Figure E-41 Range 25 - Basic 10M-25M Firing Range (Zero)

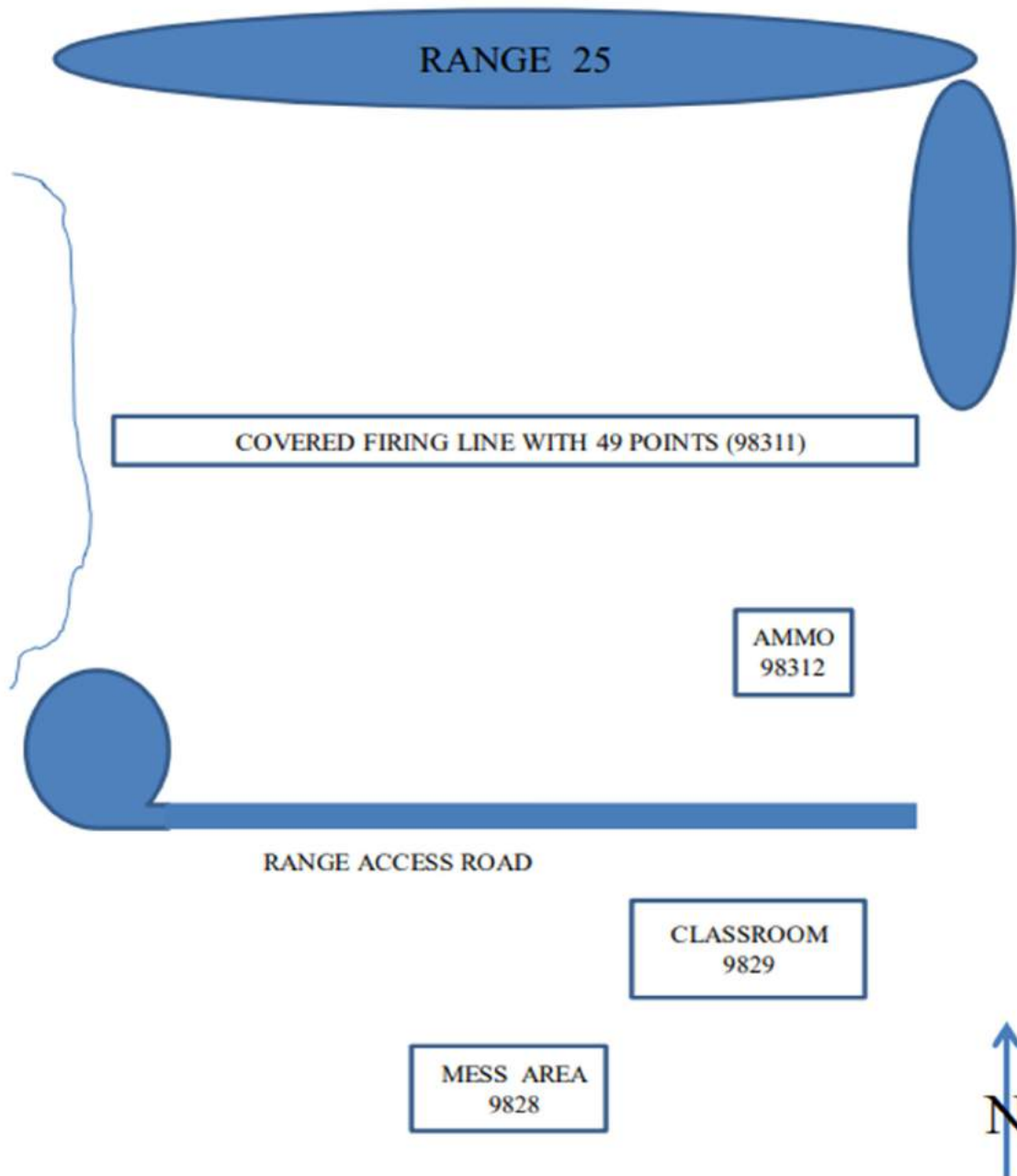




Table E-47. Range 26 - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK415259, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .5 miles range is on your right

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 50 Firing Points with Concrete Fighting Positions.
- (2) Elevated Control Tower
- (3) Classroom
- (4) Ammunition Issue Building
- (5) Bleacher Enclosure
- (6) Latrine



e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-42 Range 26 - Basic 10M-25M Firing Range (Zero)

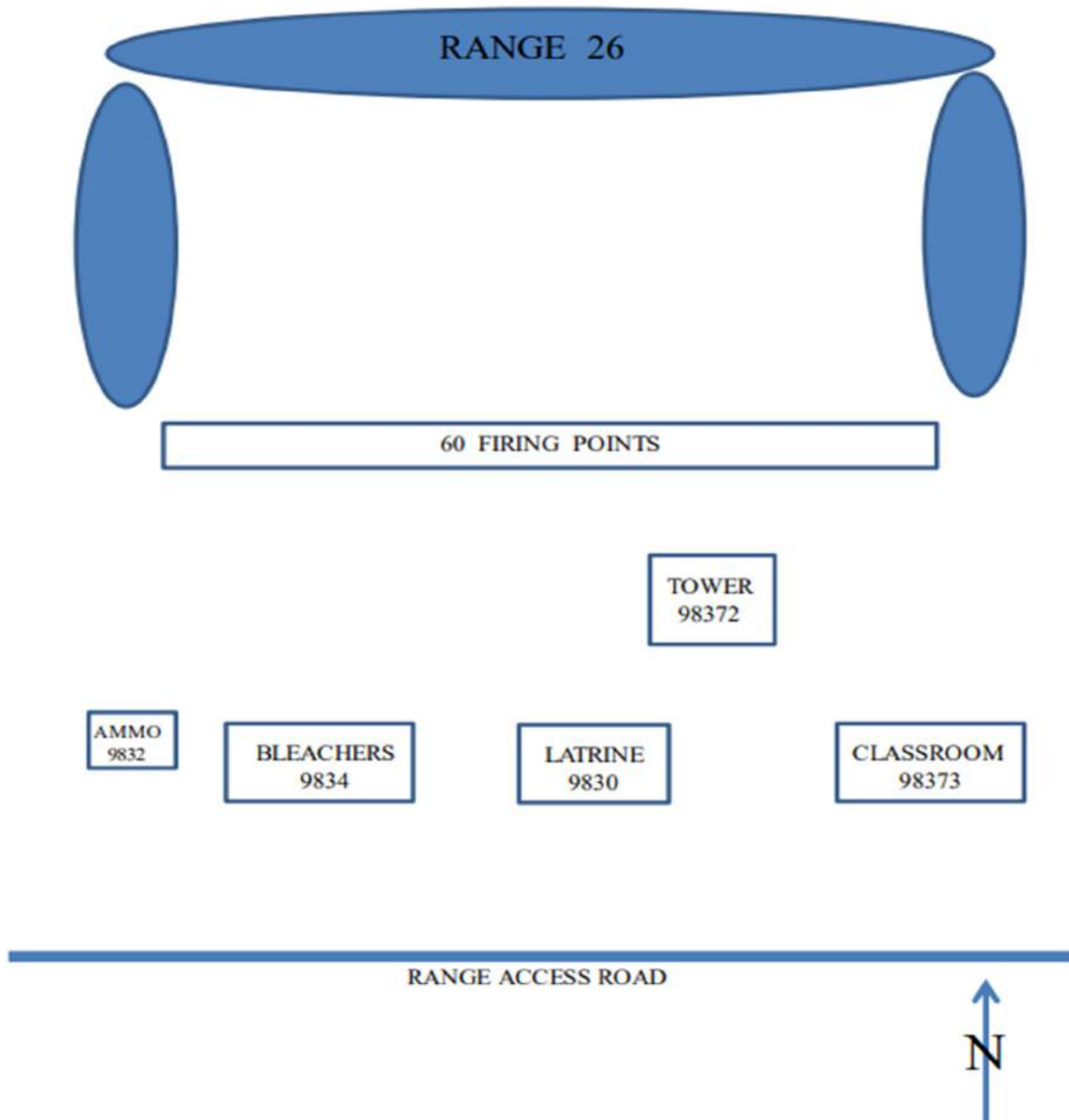




Table E-48. Range 27A - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK417258, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .4 miles range is on your right

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 32 Firing Points
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-43 Range 27A - Basic 10M-25M Firing Range (Zero)

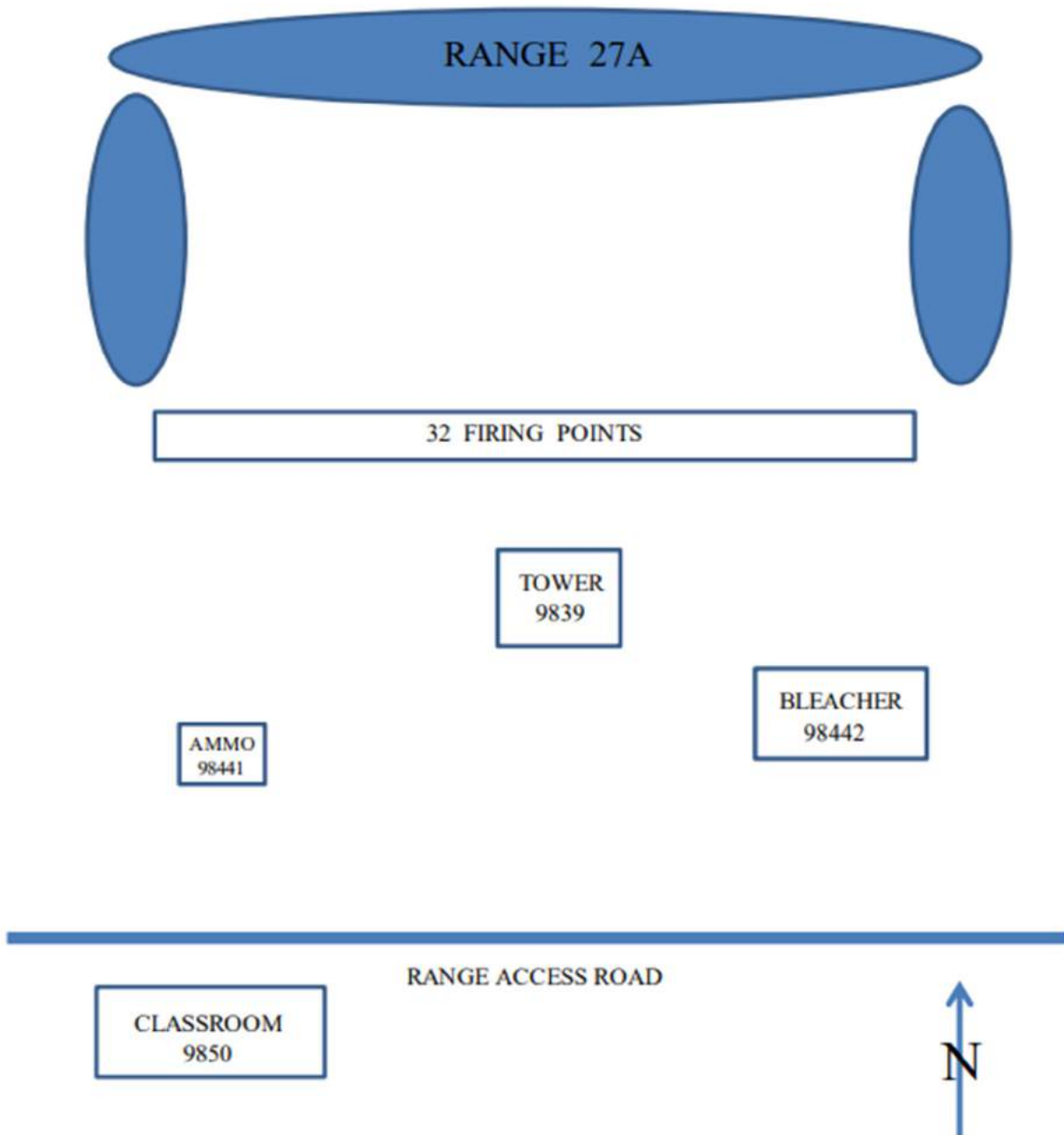




Table E-49. Range 27B - Basic 10M-25M Firing Range (Zero)

a. **LOCATION:** Located at coordinate WK418257, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .4 miles range is on your right.

c. **CAPABILITIES:**

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 32 Firing Points
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Latrine

e. **SPECIAL INSTRUCTIONS:**

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders

(3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-44 Range 27B - Basic 10M-25M Firing Range (Zero)

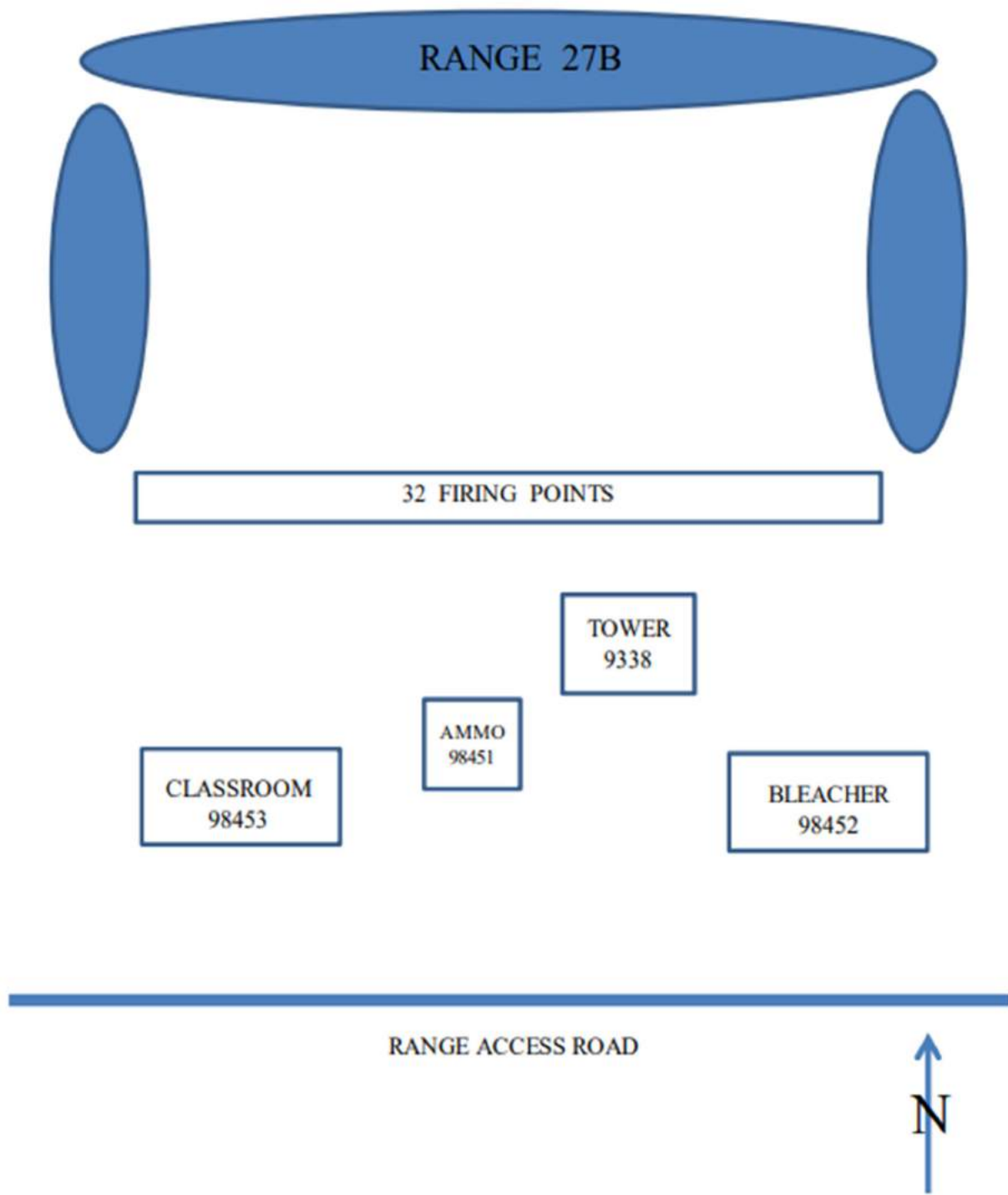






Table E-50. Range 27C - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK418257, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .3 miles range is on your right

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 32 Firing Points
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders



(3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-45 Range 27C - Basic 10M-25M Firing Range (Zero)

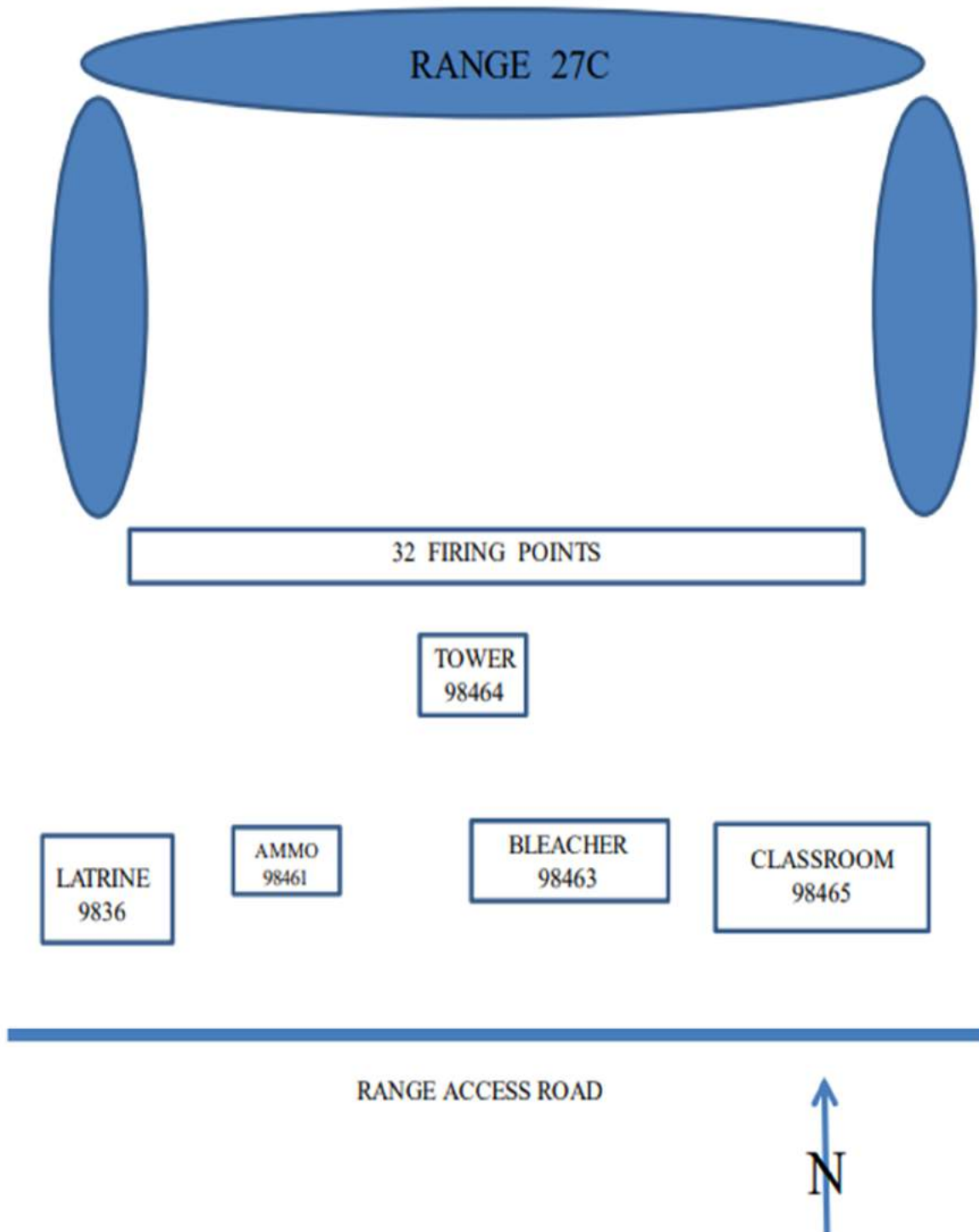




Table E-51. Range 28A – Combat Pistol Qualification Course (CPQC)

a. LOCATION: Located at coordinate WK420257, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .2 miles range is on your right

c. CAPABILITIES:

- (1) Primary: Combat Pistol Qualification Course (CPQC), Tables I thru VII only
- (2) Alternate: None
- (3) Ammunition Capability: Standard Pistol

d. FACILITIES AVAILABLE:

- (1) Firing Points: 12 lanes
- (2) Elevated Control Tower with Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Portable Latrine

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the

program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only range control maintenance personnel are authorized to repair targets.

f. CONFLICTS: None

Figure E-46 Range 28A – Combat Pistol Qualification Course (CPQC)

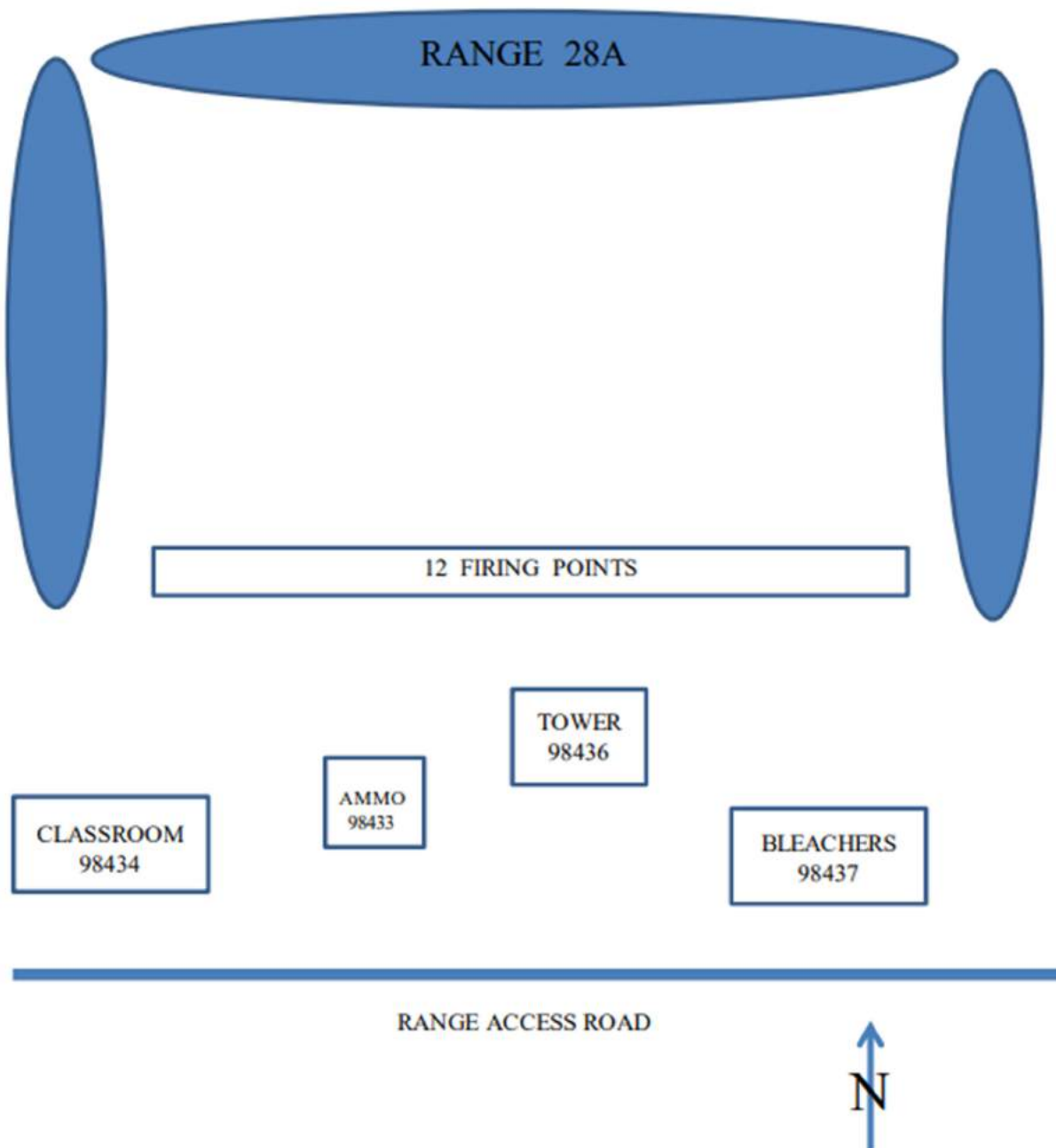




Table E-52. Range 28B – Basic 10M-25M Firing Range (Zero)

a. **LOCATION:** Located at coordinate WK420257, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 4.9 miles, turn west on access road for .2 miles range is on your right.

c. **CAPABILITIES:**

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 32 Firing Points
- (2) Elevated Control Tower.
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-47 Range 28B – Basic 10M-25M Firing Range (Zero)

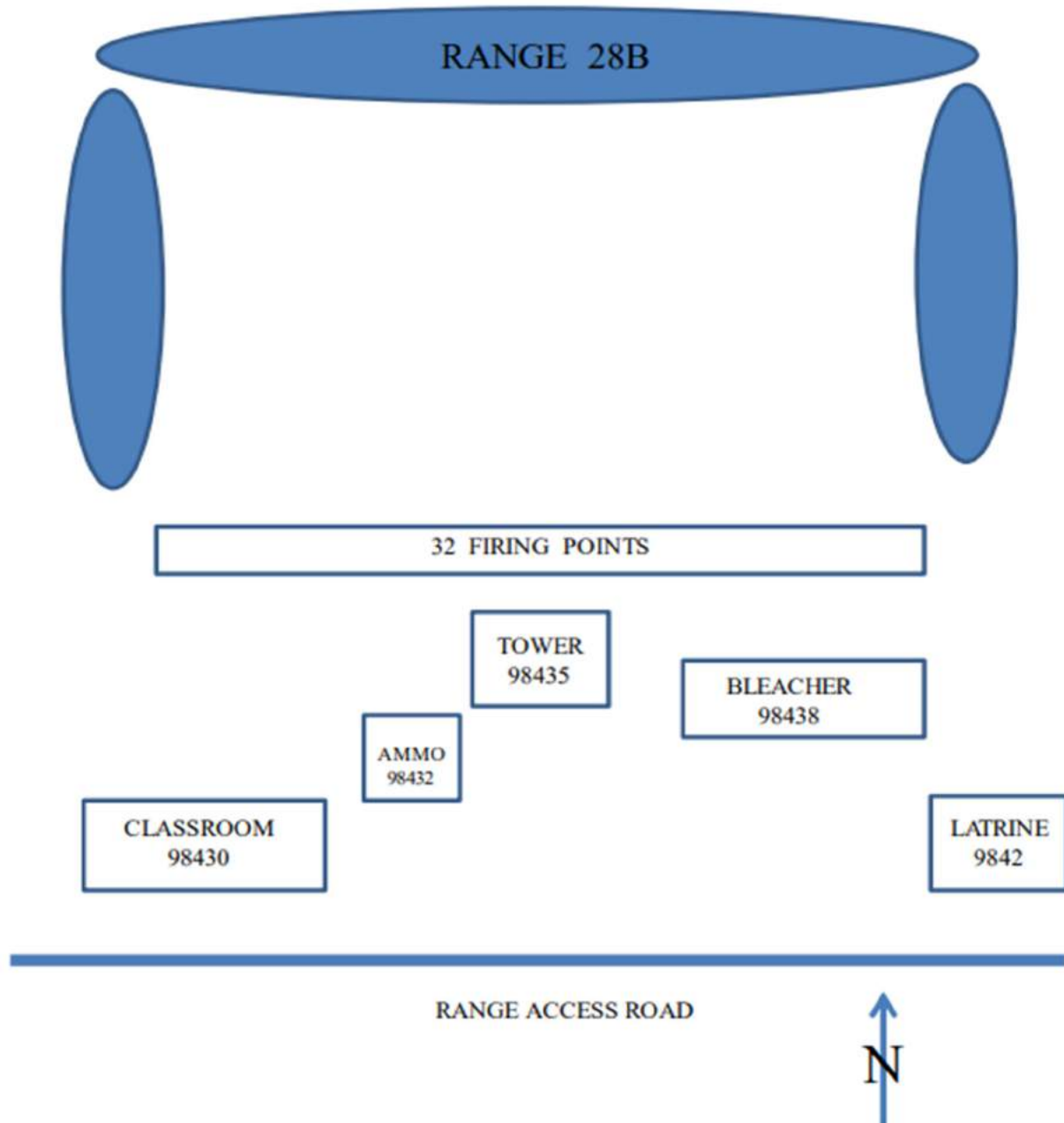






Table E-53. Range 29A – Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK420257, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 4.9 miles, turn west on access road for .1 miles range is on your right

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 32 Firing Points
- (2) Elevated Control Tower with Installed Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Covered Mess
- (7) Portable Latrine



e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-48 Range 29A – Basic 10M-25M Firing Range (Zero)

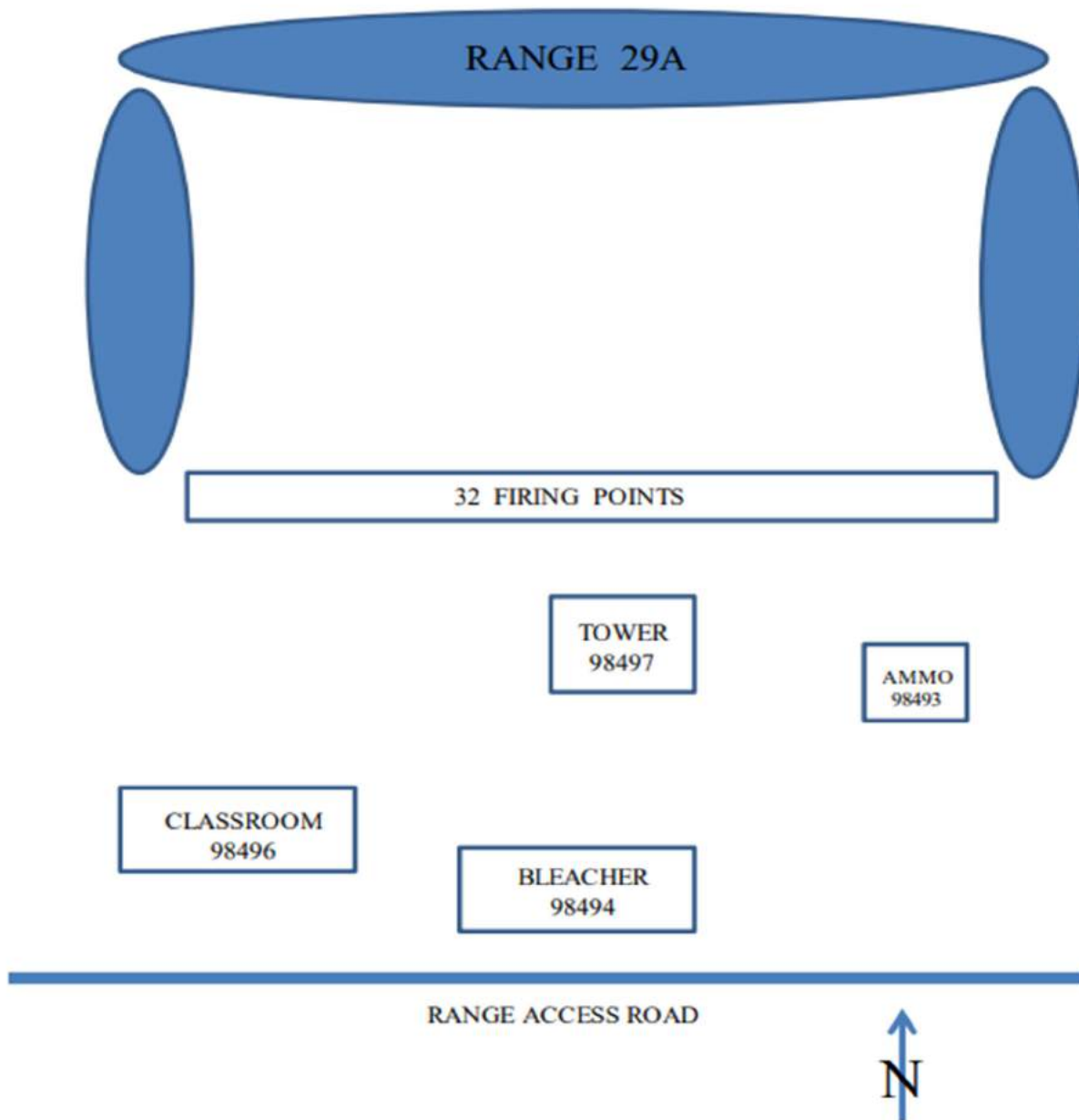




Table E-54. Range 29B - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK420257, Map 1:50,000, DIXJMTTC 001, June 2006, 7.5 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 4.9 miles, turn west on access road for .1 miles range is on your right

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 32 Firing Points
- (2) Elevated Control Tower with Installed Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Covered Mess
- (7) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-49 Range 29B - Basic 10M-25M Firing Range (Zero)

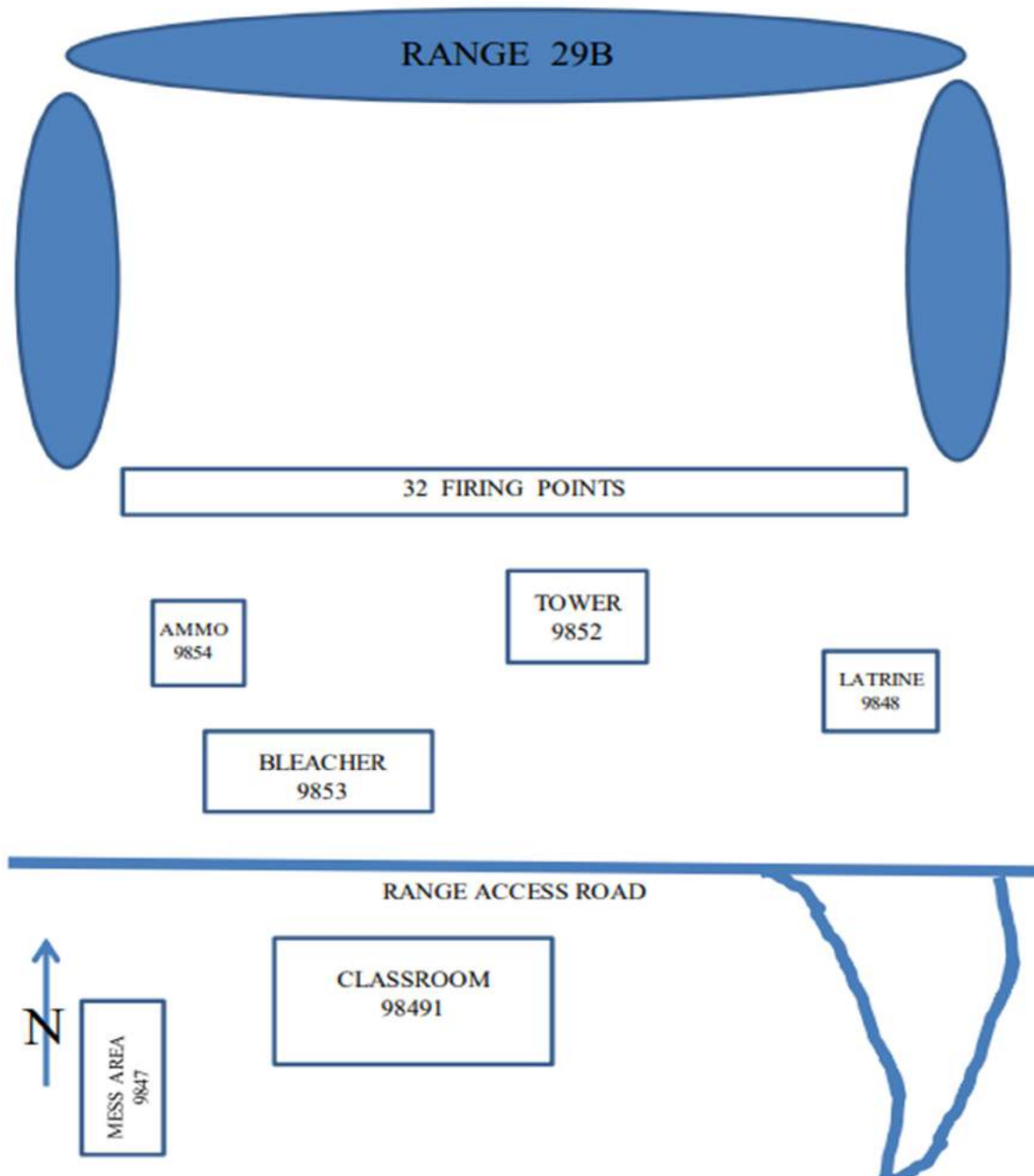




Table E-55. Range 30A – Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK420257, Map 1:50,000, DIXJMTTC 001, June 2006, 8.1 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 5.1 miles the range is on your left.

c. CAPABILITIES:

- (1) Primary: 100 Meter Advance Rifle Marksmanship (ARM)
- (2) Alternate: 100 Meter Multipurpose Range
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 20
- (2) Ammunition Point
- (3) Classroom
- (4) Bleacher Enclosure
- (5) Covered Mess
- (6) Concrete Vehicle Firing Pads (2)
- (7) Portable Latrine

e. SPECIAL INSTRUCTIONS:

(1) Request for Targets will be coordinated with Range Support Operations 10 days prior

f. CONFLICTS: None

Figure E-50 Range 30A – Multipurpose Training Range (MPTR)

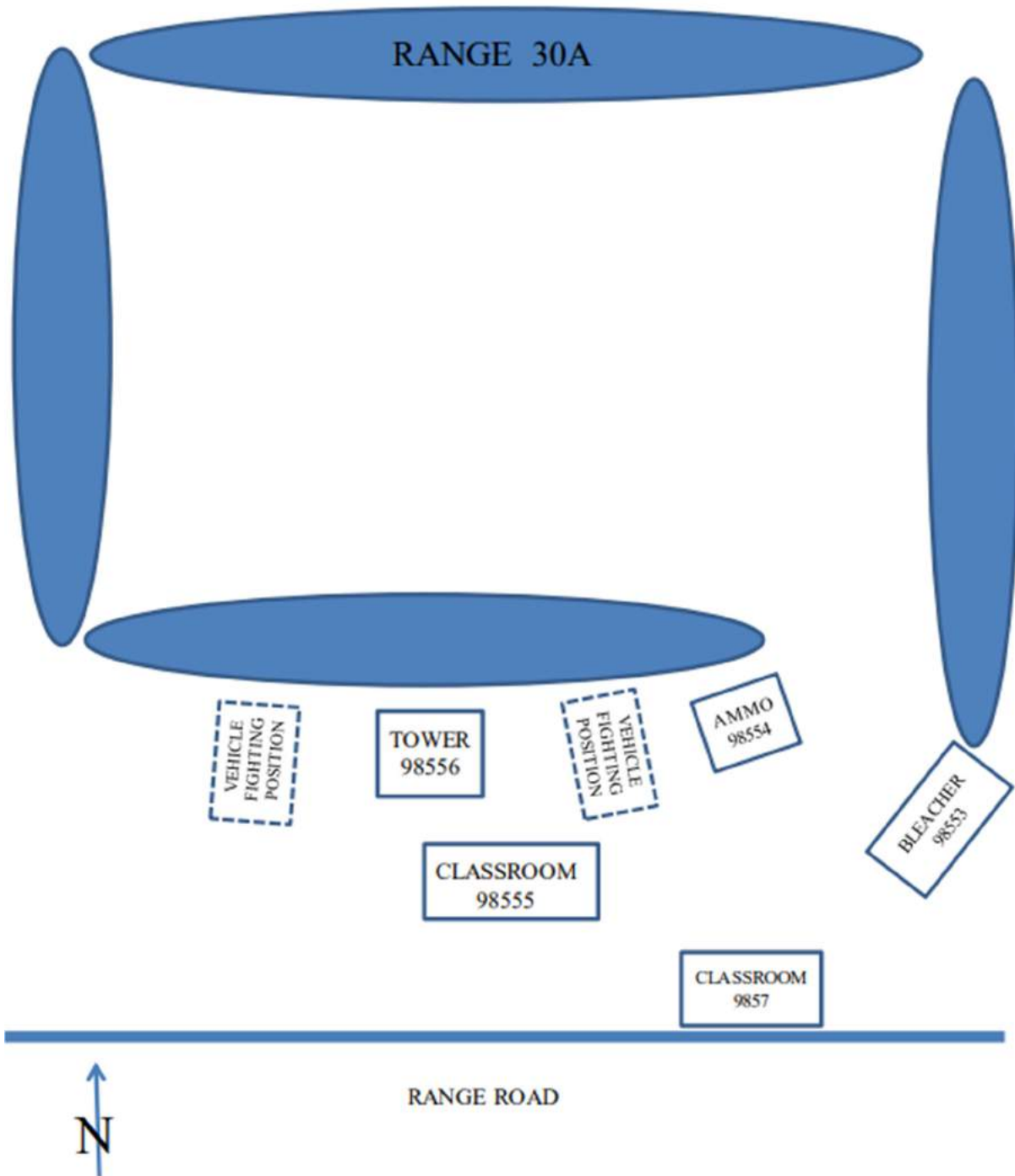






Table E-56. Range 30B – Fire and Movement Range (FMR)

a. LOCATION: Located at coordinate WK431254, Map 1:50,000, DIXJMTTC 001, June 2006, 8.1 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 5.3 miles the range is on your left.

c. CAPABILITIES:

- (1) Primary: Fire and Maneuver
- (2) Alternate: None
- (3) Ammunition Capability: Practice Hand Grenade, 5.56 mm Blank and Ball, Pyrotechnics, Smoke, 40mm TPT for Grenadier Only

d. FACILITIES AVAILABLE:

- (1) Firing Points: 4 Lanes
- (2) Elevated Control Tower: 2
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine



e. SPECIAL INSTRUCTIONS:

- (1) A safety officer is required on each lane to control movement
- (2) Communications is required from each lane to a centralized controlling officer in order to conduct maneuver on multiple lanes at one time. Units are responsible for supplying the communications.
- (3) Control measures will be implemented to ensure blank ammunition and ball ammunition are not issued at the same time
- (4) All live fire exercises will be preceded by a walk through and dry fire exercise before conducting live fire
- (5) All organizations conducting live fire exercises will submit a CONOP of their operation and risk assessment to the USASAFD Range Safety Officer for review and approval before conducting their exercise

f. CONFLICTS: None

Figure E-51 Range 30B – Fire and Movement Range (FMR)

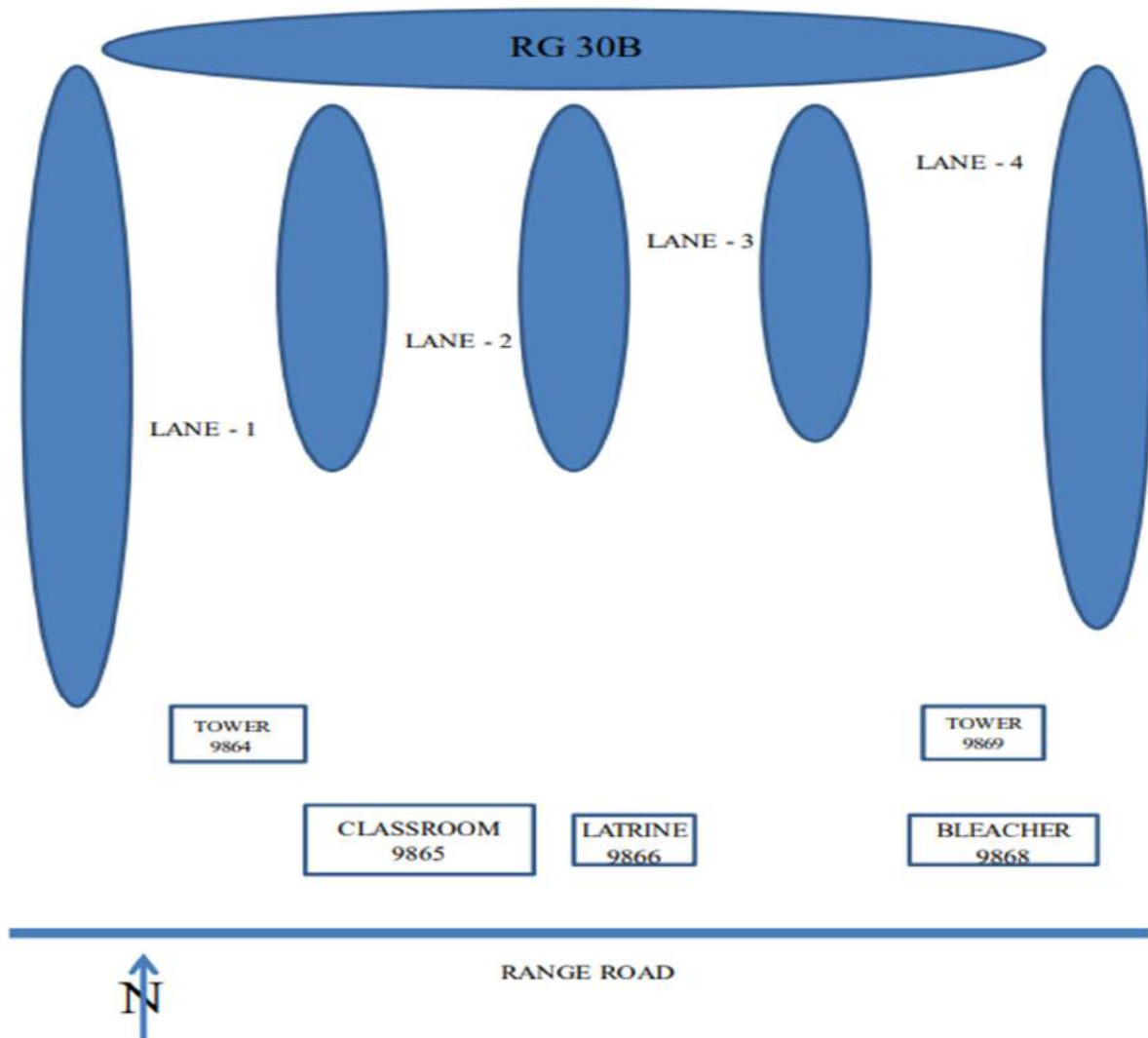




Table E-57. Range 31 - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK443254, Map 1:50,000, DIXJMTTC 001, June 2006, 8.2 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 6.2 miles the range is on your left.

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 25 Meter Zero - 13
- (2) Covered Firing Line
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Portable Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders

(3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-52 Range 31 - Basic 10M-25M Firing Range (Zero)

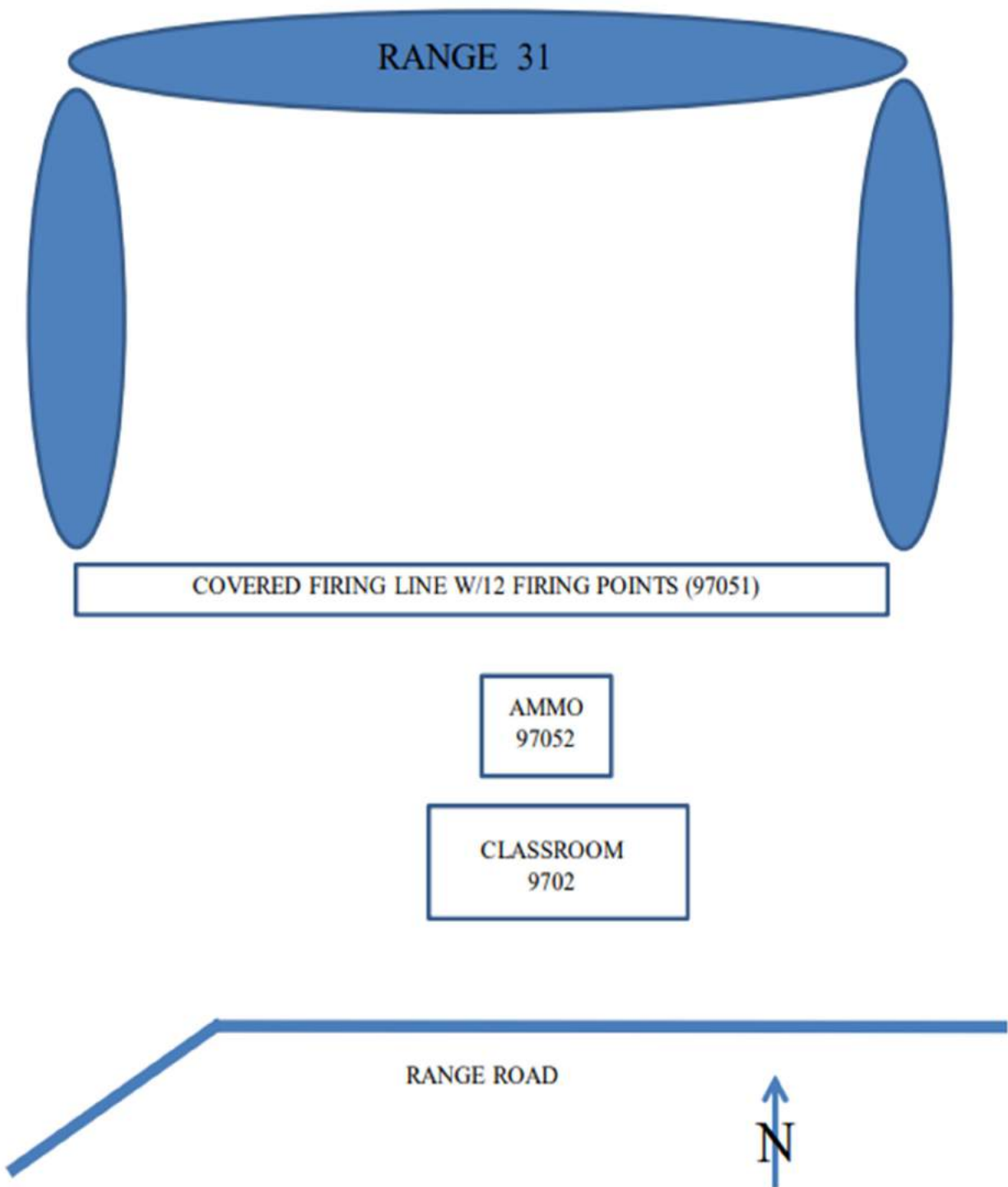




Table E-58. Range 32 – Automated Multipurpose Training Range (MPTR)

a. LOCATION: Located at coordinate WK445254, Map 1:50,000, DIXJMTTC 001, June 2006, 8.3 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 6.4 miles the range is on your left

c. CAPABILITIES:

- (1) Primary: Field Fire
- (2) Alternate: None
- (3) Ammunition Capability: 5.56 and 7.62

d. FACILITIES AVAILABLE:

- (1) Firing Points: 16
- (2) Elevated Control Tower with Installed Public Address System
- (3) Classroom
- (4) Bleacher Enclosure
- (5) Latrine
- (6) Covered Mess

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the

program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control maintenance personnel are authorized to repair targets

(3) Computer is run by Range Control personnel only. Using agencies provide an OIC and RSO and assistant instructors

(4) Flood lights on is the automatic signal for cease fire

(5) It is recommended that the OIC or RSO use a night vision device to ensure proper orientation of weapons and personnel compliance with tower directives

f. CONFLICTS: None

Figure E-53 Range 32 – Automated Multipurpose Training Range (MPTR)

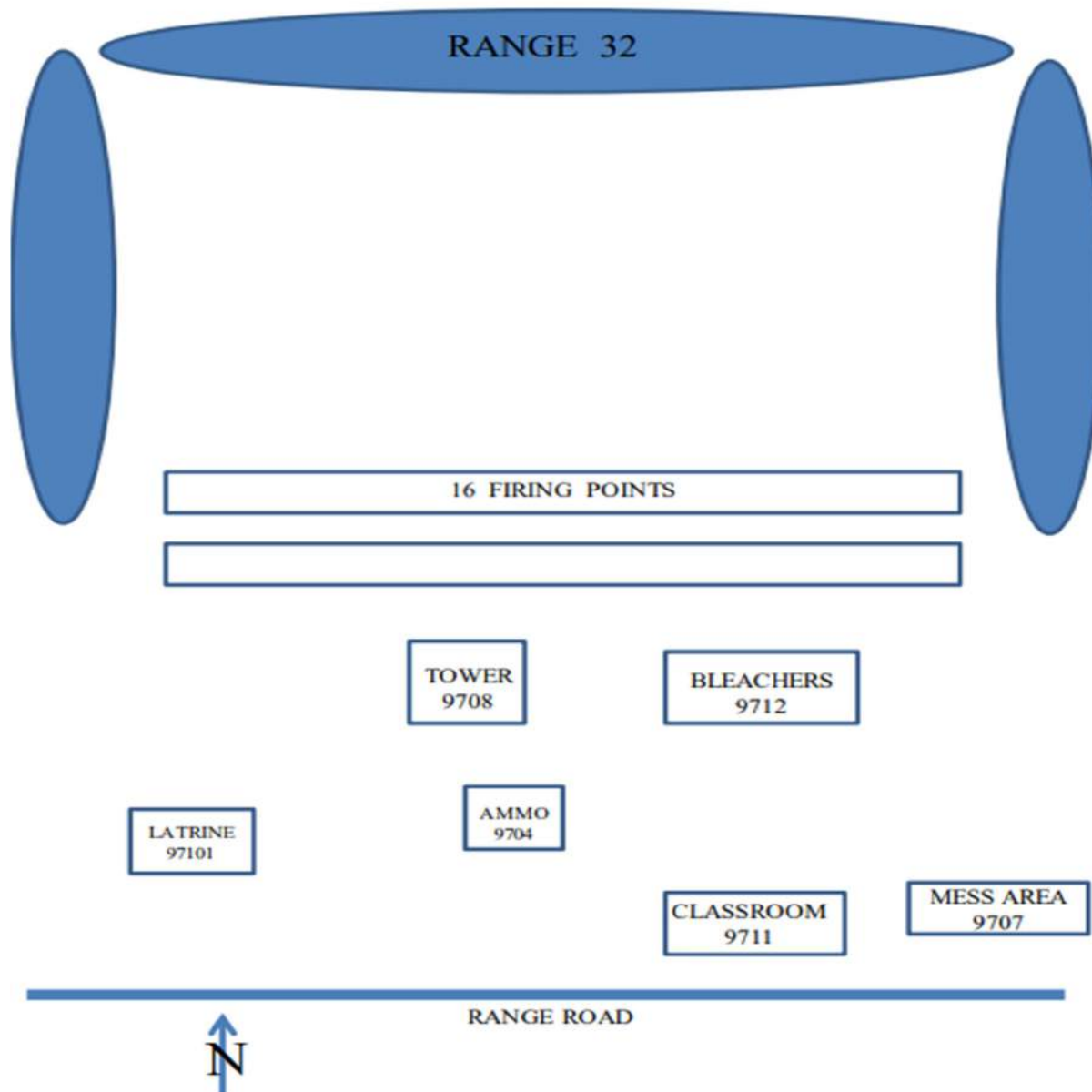






Table E-59. Range 33 - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK447255, Map 1:50,000, DIXJMTTC 001, June 2006, 8.4 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 6.5 miles the range is on your left.

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 25 Meter Zero - 12
- (2) Covered Firing Line
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Portable Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders



(3) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-54 Range 33 - Basic 10M-25M Firing Range (Zero)

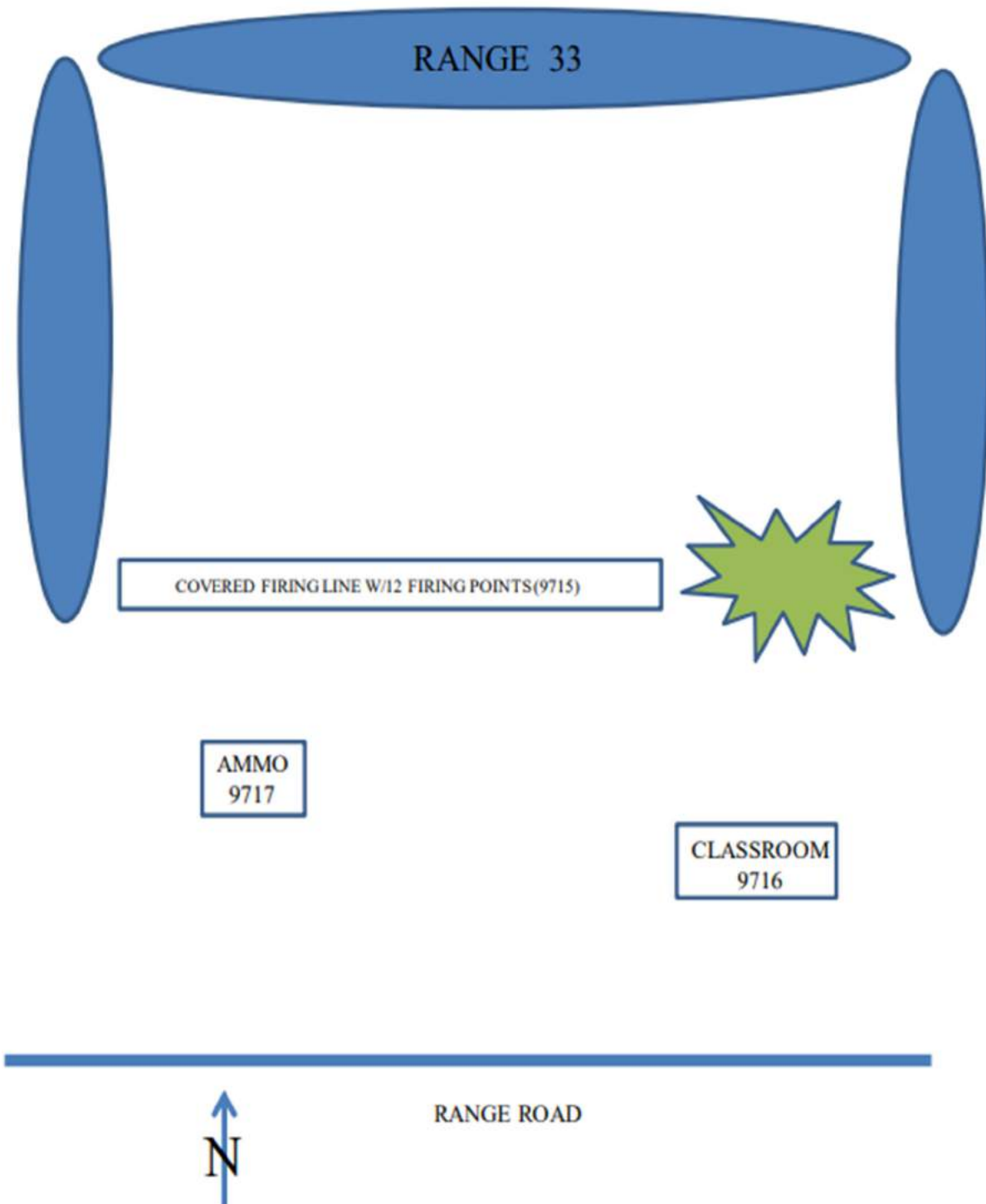




Table E-60. Range 34 – Automated Record Fire Range (ARF)

a. **LOCATION:** Located at coordinate WK450255, Map 1:50,000, DIXJMTTC 001, June 2006, 8.6 miles from ASA Dix Headquarters on South Boundary Road

b. **DIRECTION:** Drive south on Texas Avenue. Turn east on Range Road for 6.7 miles the range is on your left.

c. **CAPABILITIES:**

- (1) Primary: Modified Record Fire Range
- (2) Alternate:
- (3) Ammunition Capability: 5.56 mm

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 16 with barricades
- (2) Elevated Control Tower with Installed Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine
- (7) Covered Mess

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control support personnel are authorized downrange

(3) Flood lights on is the automatic signal for cease fire

(4) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS: None

Figure E-55 Range 34 – Automated Record Fire Range (ARF)

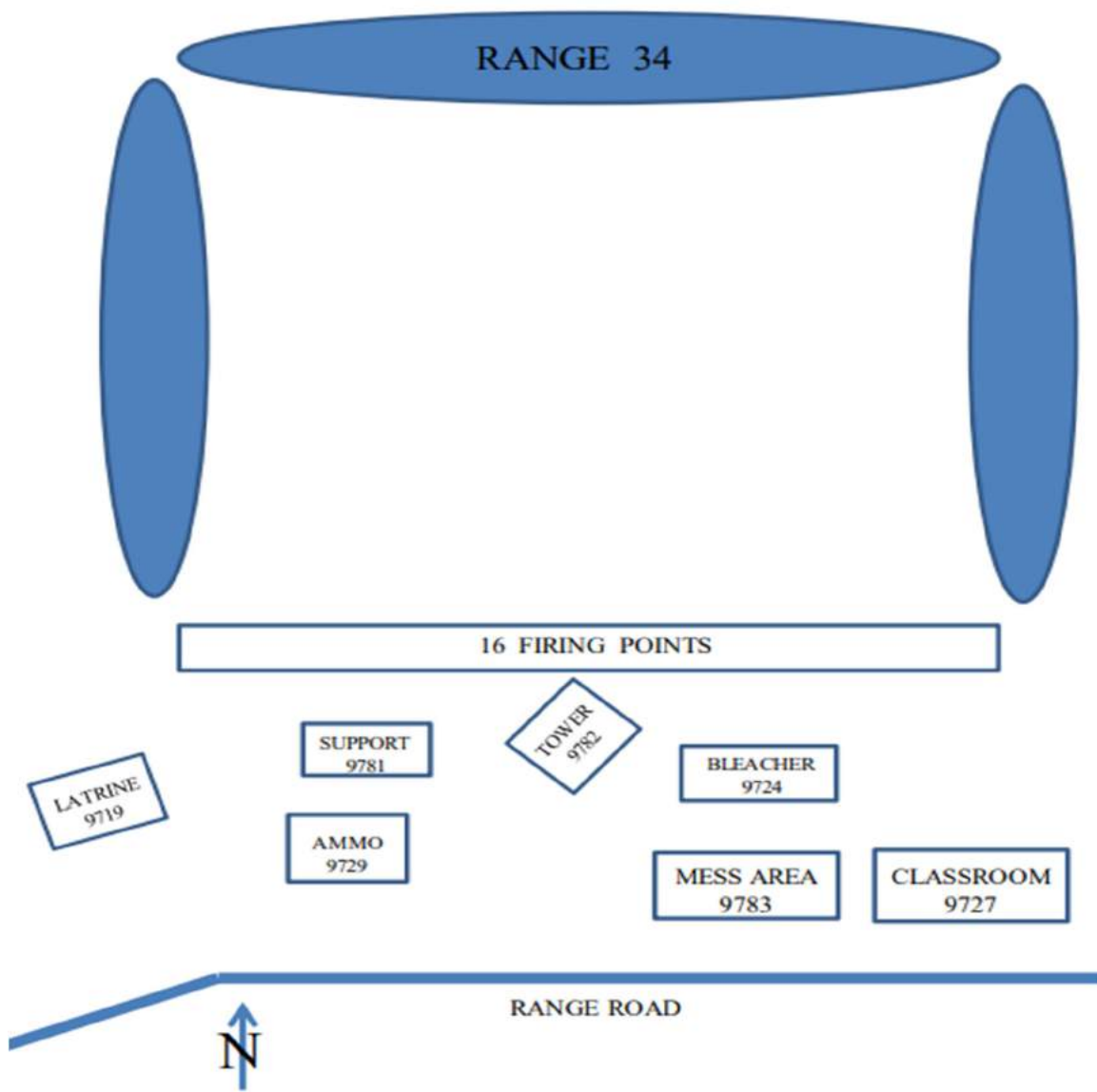




Table E-61. Range 35 - Automated Record Fire Range (ARF)

a. LOCATION: Located at coordinate WK450255, Map 1:50,000, DIXJMTTC 001, June 2006, 8.6 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 6.7 miles the range is on your left

c. CAPABILITIES:

- (1) Primary: Automated Record Fire Range
- (2) Alternate: None
- (3) Ammunition Capability: 5.56 mm

d. FACILITIES AVAILABLE:

- (1) Firing Points: 16 with barricades
- (2) Elevated Control Tower with Installed Public Address System
- (3) Ammunition Issue Building
- (4) Administrative Building
- (5) Classroom
- (6) Bleacher Enclosure
- (7) Latrine
- (8) Covered Mess

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control support personnel are authorized downrange

(3) Flood lights on is the automatic signal for cease fire

(4) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS: None

Figure E-56 Range 35 - Automated Record Fire Range (ARF)

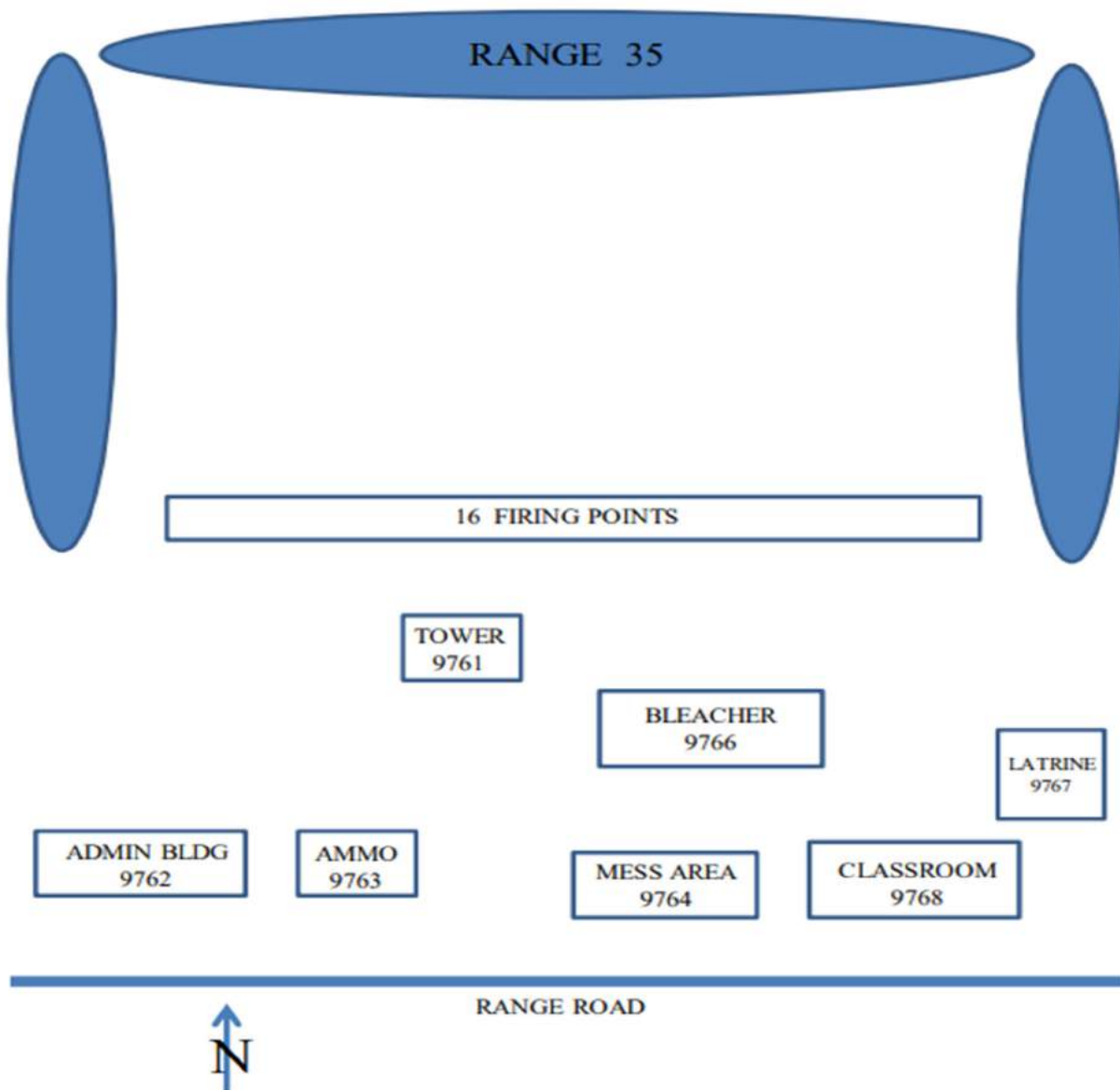






Table E-62. Range 37 - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK458255, Map 1:50,000, DIXJMTTC 001, June 2006, 9.3 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 7.1 miles the range is on your right.

c. CAPABILITIES:

- (1) Primary: Army Standard 25-meter Rifle Zero Range
- (2) Alternate: Advance Rifle Marksmanship (ARM); Pistol and Shotgun Familiarization
- (3) Ammunition Capability: Standard Pistol, 5.56, 7.62 and Shotgun

d. FACILITIES AVAILABLE:

- (1) Firing Points: 6
- (2) Ammunition Issue Building
- (3) Bleacher Enclosure
- (4) Covered Mess

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames
- (2) When utilizing pistols or shotguns or conducting ARM training the dual framed target holder cannot be used for target support. These frames are removed, and units must request E silhouettes mounted on 1x2 board. Prior to requesting inspection return framed target holders
- (3) Telephone located in call box on Range Tower or Telephone-Pole



f. CONFLICTS: None

Figure E-57 Range 37 - Basic 10M-25M Firing Range (Zero)

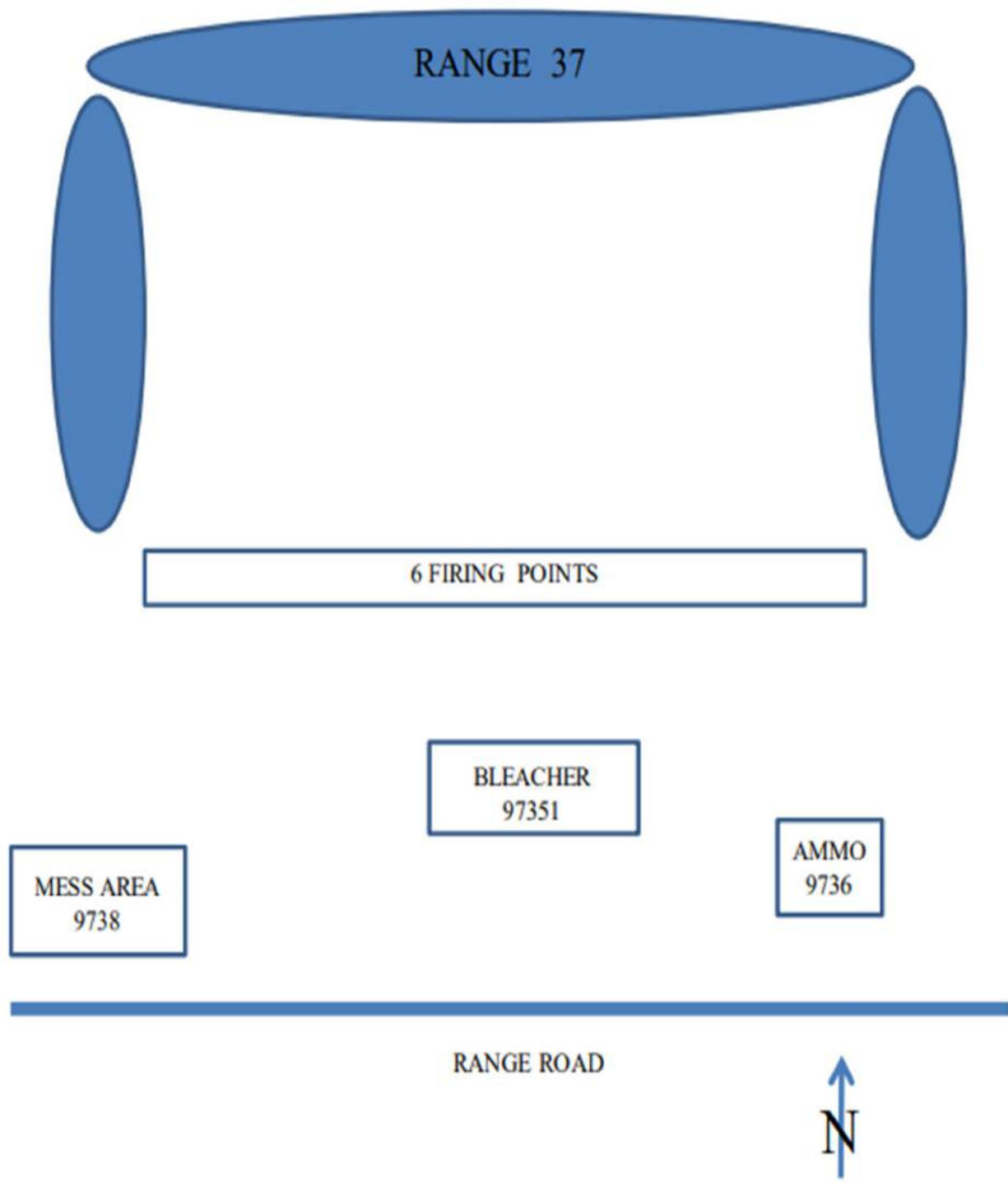




Table E-63. Range 38 - Automated Record Fire Range (ARF)

a. LOCATION: Located at coordinate WK450255, Map 1:50,000, DIXJMTTC 001, June 2006, 9.6 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 7.4 miles the range is on your left

c. CAPABILITIES:

- (1) Primary: Automated Record Fire Range
- (2) Alternate: None
- (3) Ammunition Capability: 5.56 mm

d. FACILITIES AVAILABLE:

- (1) Firing Points: 16 with barriers
- (2) Elevated Control Tower with Installed Public Address System
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Latrine
- (7) Covered Mess
- (8) Helipad directly across Range Road

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control support personnel are authorized downrange

(3) Flood lights on is the automatic signal for cease fire

(4) Parking is not authorized in vicinity of the helipad.

(5) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS: None

Figure E-58 Range 38 - Automated Record Fire Range (ARF)

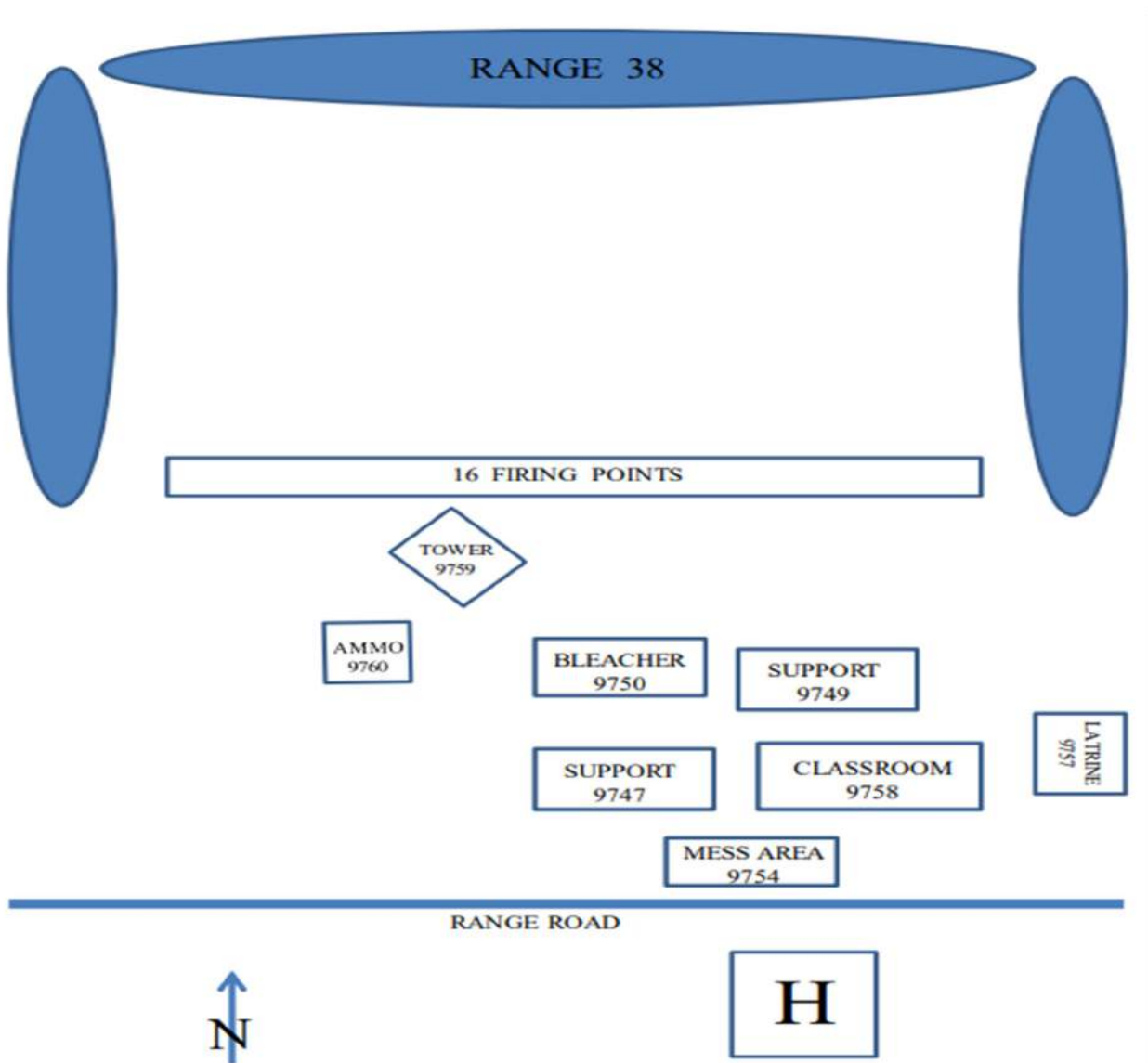




Table E-64. Range 39A - Basic 10M-25M Firing Range (Zero)

a. LOCATION: Located at coordinate WK471258, Map 1:50,000, DIXJMTTC 001, June 2006, 11.2 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 10 miles the range is on your left

c. CAPABILITIES:

(1) Primary: 25 Meter Multipurpose facility for pistol and rifle fire

(2) Alternate: Mortar Firing Point 2

(2) Ammunition Capability: Standard Pistol, 5.56, 7.62, Shotgun and 60mm, 81mm and 120mm Mortars

d. FACILITIES AVAILABLE:

(1) Firing Points: 20

(2) Control Tower Elevated

(3) Ammunition Issue Building

(4) Classroom

(5) Covered Mess

(6) Bleacher Enclosure

(7) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Firers are not allowed to move beyond the line of target frames.
- (2) When utilizing pistols or shotguns the dual framed target holder cannot be used for target support. These frames are laid down and units must request E silhouettes mounted on 1x2 board
- (3) Mortars will follow indirect firing procedures in Appendix F
- (4) Telephone located in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E-59 Range 39A - Basic 10M-25M Firing Range (Zero)

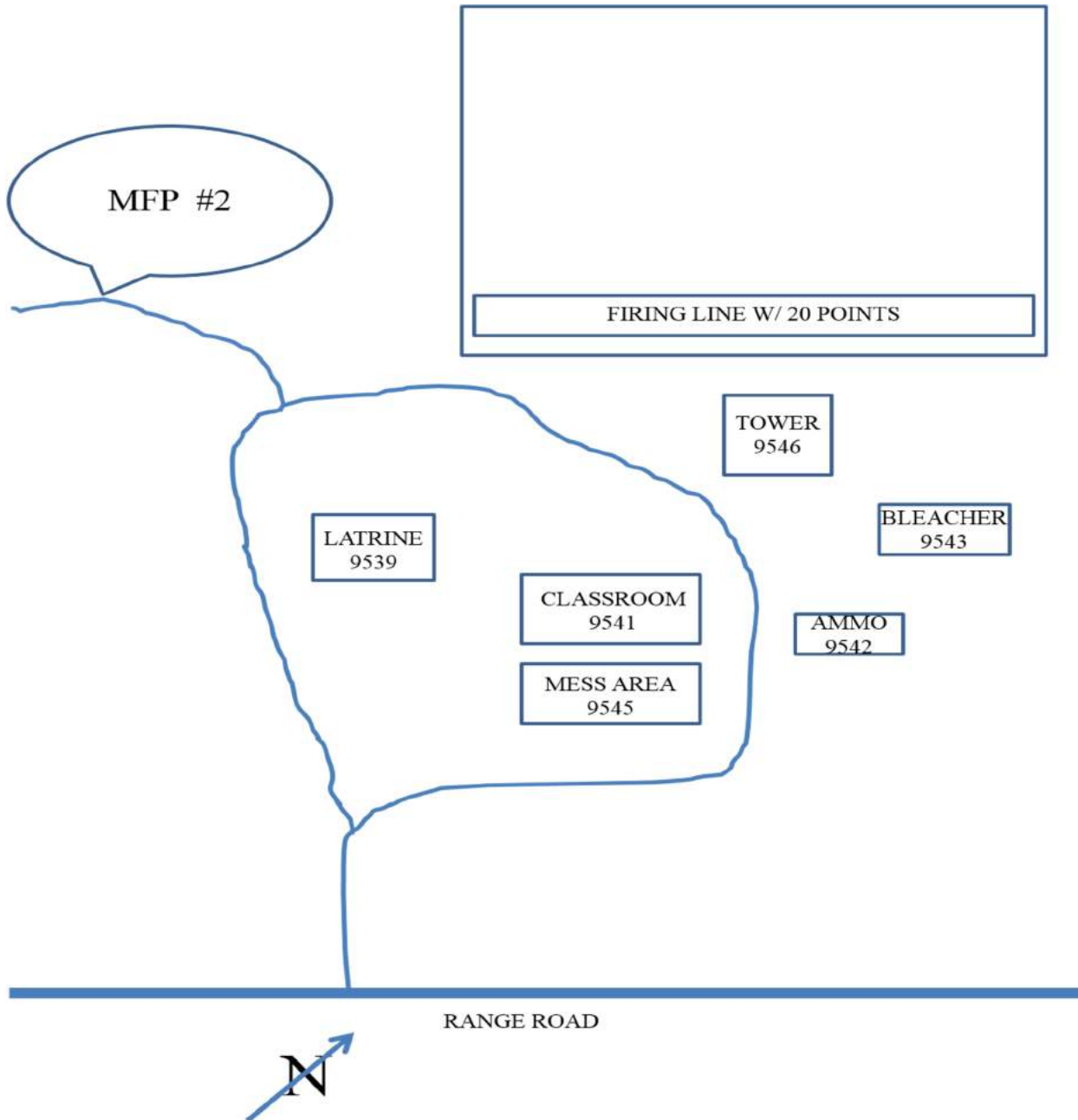






Table E - 65. Range 39B - Battle of Monmouth (American Revolution)

a. LOCATION: Located at coordinate WK473262, Map 1:50,000, DIXJMTTC 001, June 2006, 12.2 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 10 miles the range is on your left

c. CAPABILITIES:

- (1) Primary: Mortar Firing Point 4
- (2) Alternate: None
- (2) Ammunition Capability: 60mm, 81mm and 120mm Mortars.

d. FACILITIES AVAILABLE:

- (1) Firing Points:
- (2) Control Tower Elevated
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Covered Mess
- (6) Bleacher Enclosure
- (7) Latrine



e. SPECIAL INSTRUCTIONS:

- (1) Mortars will follow indirect firing procedures in appendix F
- (2) Telephone is in call box on Range Tower or Telephone-Pole

f. CONFLICTS: None

Figure E - 60 Range 39B - Battle of Monmouth (American Revolution)

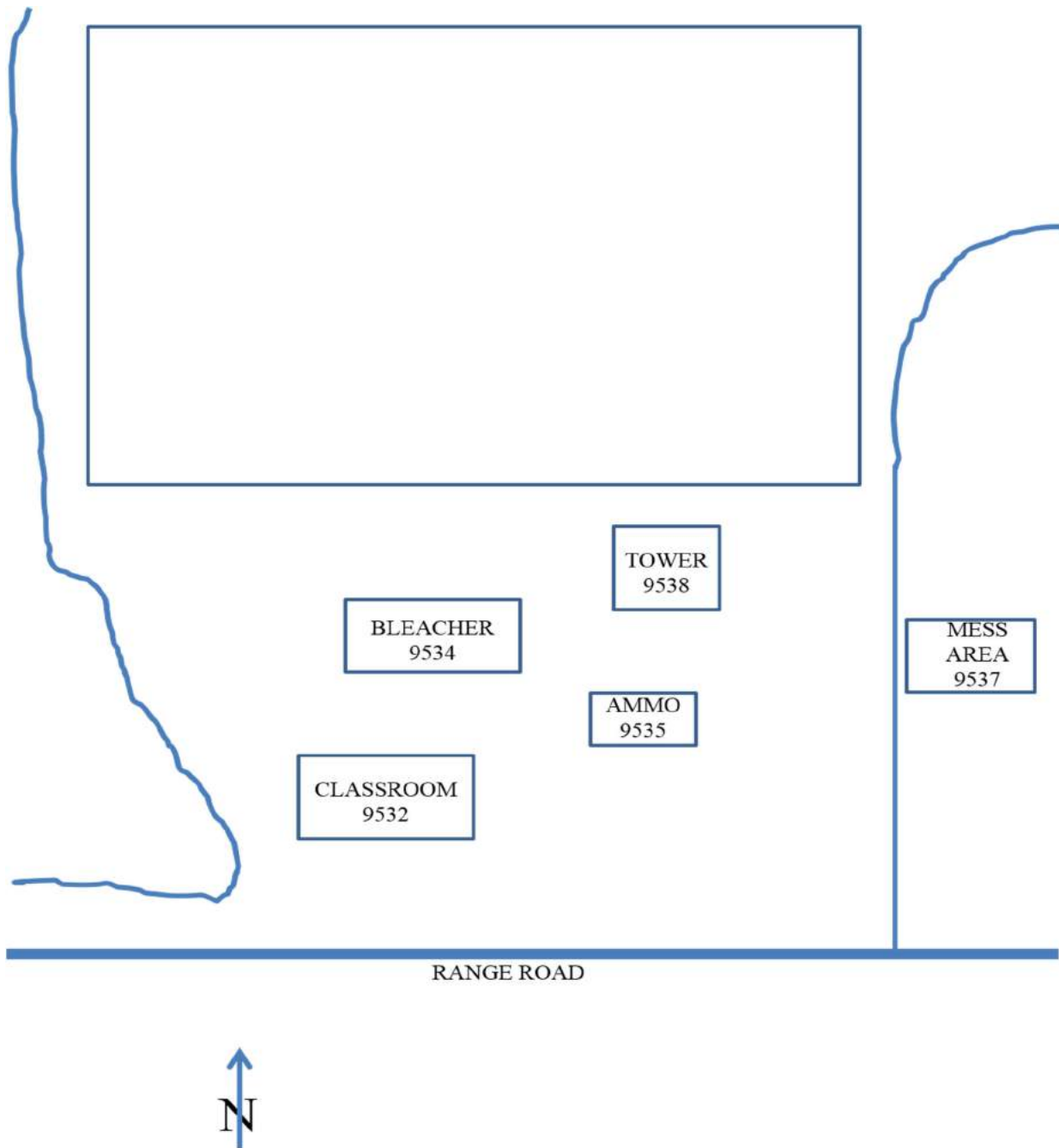




Table E - 66. Range 40 – Automated Multipurpose Machine Gun Range

a. LOCATION: Located at coordinate WK4872620, Map 1:50,000, DIXJMTTC 001, June 2006, 12.2 miles from ASA Dix Headquarters on South Boundary Road

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 12 miles the range is on your left

c. CAPABILITIES:

- (1) Primary: .50 cal and Mk-19 Qualification Range
- (2) Alternate: Multipurpose Machine Gun Range
- (2) Ammunition Capability: 5.56mm, 7.62mm, .50 cal, 40mm (Practice Only)

d. FACILITIES AVAILABLE:

- (1) Firing Points: 4 Lanes with Mounted and Dis-Mounted Firing Positions
- (2) Control Tower Elevated
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Covered Mess
- (6) Bleacher Enclosure
- (7) Portable Latrine

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only Range Control support personnel are authorized downrange

(3) Flood lights on is the automatic signal for cease fire

(4) EOD Emergency Destruction Operations take priority over weapons qualification

(5) 40mm **HE** rounds **will not** be used under any circumstances

(6) Only one caliber weapon system may be used at a time

(7) USASAFD Form 2257-R (Mk-19 Cleanup Agreement), Figure R - 15, must be completed prior to receiving permission to fire the Mk-19

(8) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS:

(1) EOD Range

(2) Range 39B

(3) MFP 4

Figure E - 61 Range 40 – Automated Multipurpose Machine Gun Range

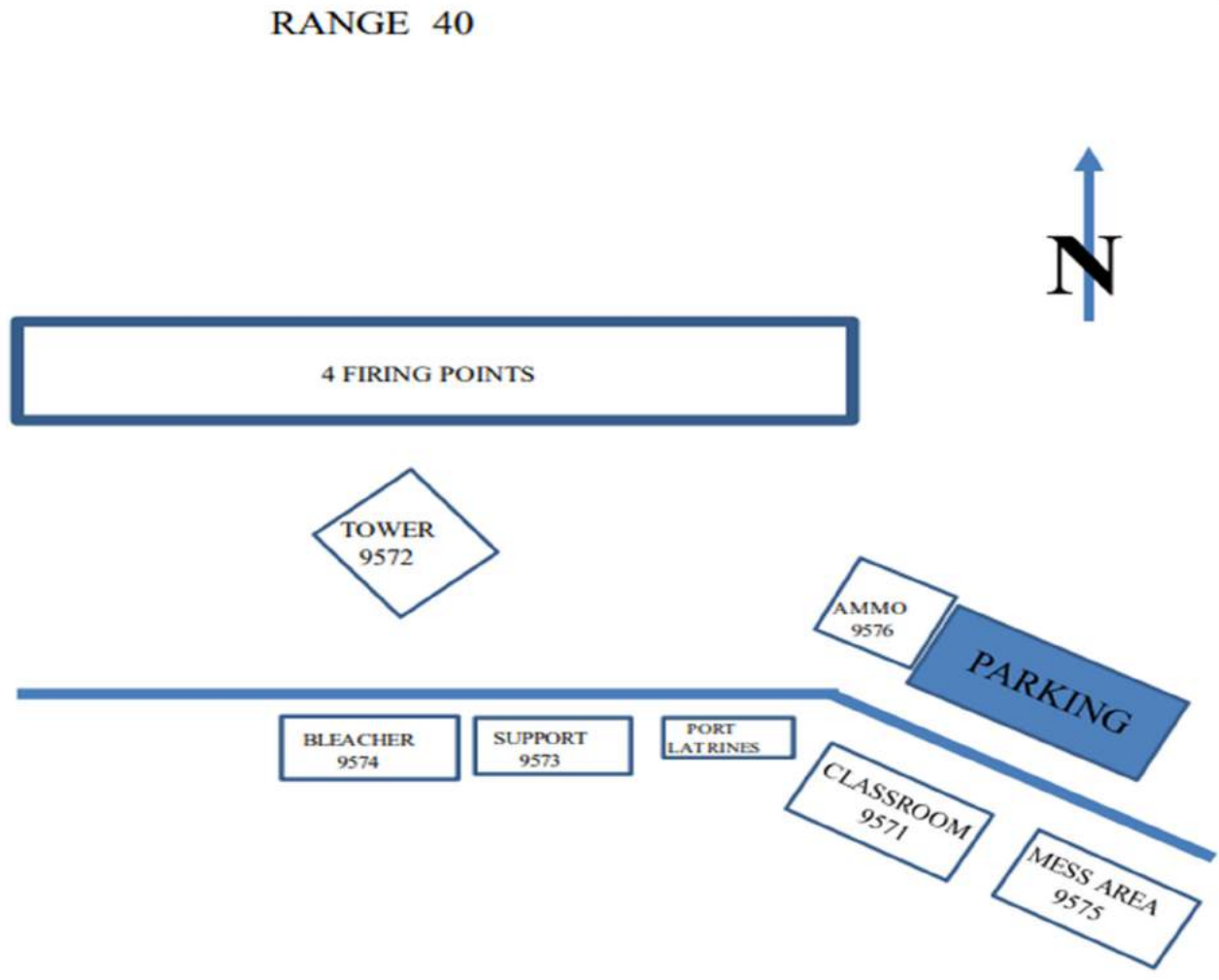




Table E - 67. Range 47A – Mons (WW I)

a. **LOCATION:** Located at coordinate WK483278, Map 1:50,000, DIXJMTTC 001, June 2006, 13.1 miles from ASA Dix Headquarters on County Highway 33

b. **DIRECTION:** Drive south on Texas Avenue, turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 1.1 miles, the range is on your left

c. **CAPABILITIES:**

- (1) Primary: Two Lane Modified Sniper Field Fire 100 – 1000 meters
- (2) Mortar Firing Point 5
- (2) Ammunition Capability: 5.56, 7.62 and .50 cal (See Special Instructions); 81mm and 120mm Mortars.

d. **FACILITIES AVAILABLE:**

- (1) Firing Points: 2 Sniper Lanes; Mortar Firing Point 5
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure

e. **SPECIAL INSTRUCTIONS:**

- (1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the targets; when support personnel are confident in unit ability to run the computer program they will depart and check back periodically. If the unit experiences problems with the program

or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only range control maintenance personnel are authorized to repair targets

(3) Any unit receiving permission to utilize steel or other targets are responsible for placing and removing the targets. Before proceeding down range at any time they will first contact the firing desk and request permission to go down range; when they return from down range they will contact the firing desk to let them know they have returned up range.

(4) Sniper Rifle .50 cal is the only .50 cal authorized to be fired

(5) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS:

(1) Range 47B - Down Range Area

(2) Mortar Firing Point #5

Figure E - 62 Range 47A - Mons (WW I)

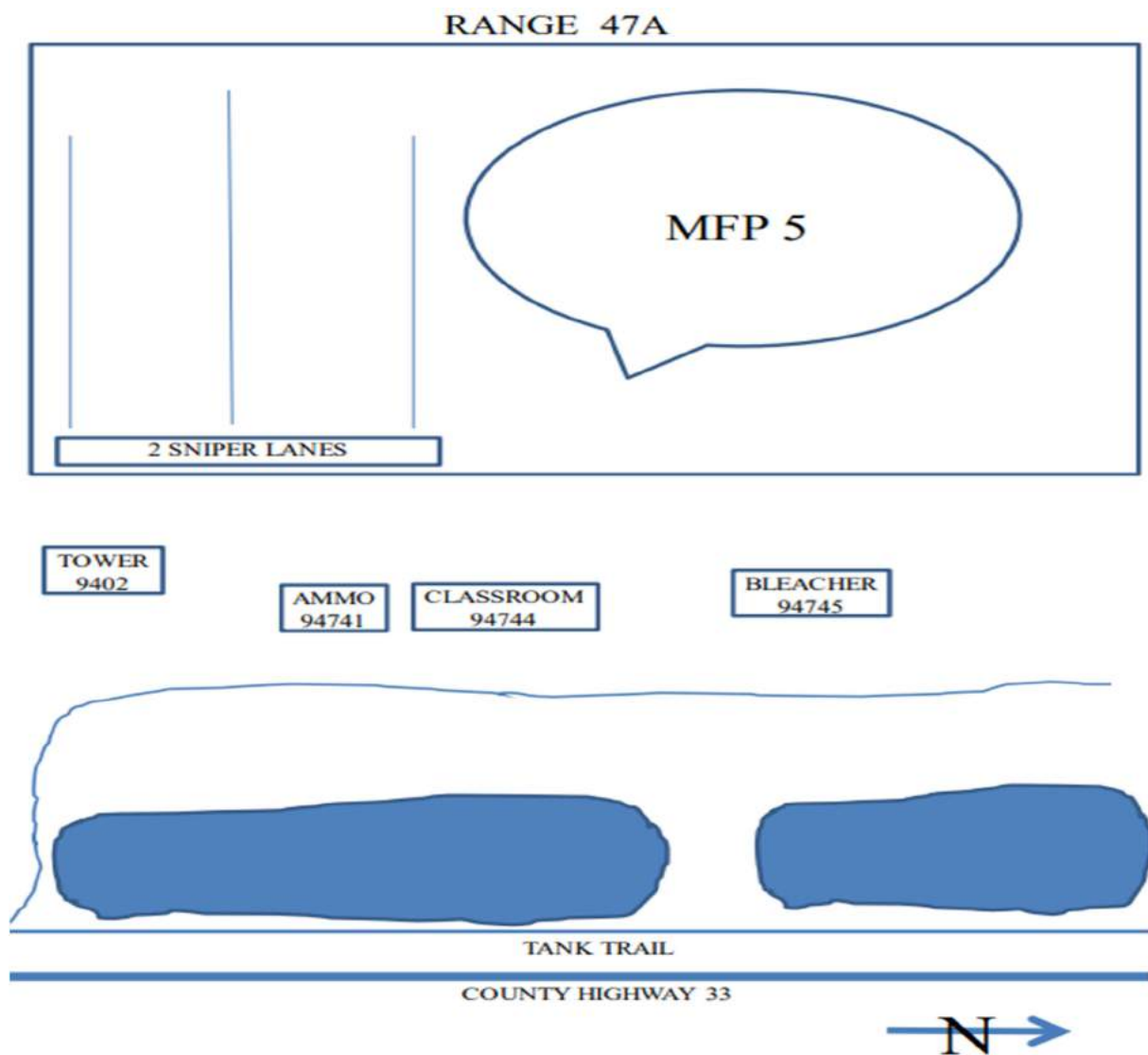






Table E - 68. Range 47B - Trenton (American Revolution)

a. LOCATION: Located at coordinate WK482281, Map 1:50,000, DIXJMTTC 001, June 2006, 13.2 miles from ASA Dix Headquarters on County Highway 33

b. DIRECTION: Drive south on Texas Avenue, turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 1.3 miles, the range is on your left

c. CAPABILITIES:

- (1) Primary: Machinegun Qualification and Machinegun Zero
- (2) Alternate: Known Distance (KD) with Targets out to 800 Meters
- (3) Ammunition Capability: 5.56, 7.62 and 40mm (Target Practice Only)

d. FACILITIES AVAILABLE:

- (1) Firing Points: Machinegun – 3
- (2) Elevated Control Tower
- (3) Ammunition Issue Building
- (4) Classroom
- (5) Bleacher Enclosure
- (6) Covered Mess
- (7) Latrine
- (8) Helipad

e. SPECIAL INSTRUCTIONS:

(1) Range support personnel will provide training to the unit in the operation of the TRACR program to run the qualification tables; when support personnel are confident in unit ability to run qualification tables they will depart and check back periodically. If the unit experiences problems with the program or targets they will contact the range firing desk at 609-562-4600, a range support person will be dispatched to check on the problem.

(2) Only range control maintenance personnel are authorized to repair targets

(3) 40mm **HE** rounds **will not** be used under any circumstances

(4) Only one caliber weapon system may be used at a time

(5) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon.

(6) Zero targets must be coordinated 10 days prior with Range Support Operations

(7) USASAFD Form 2257-R (Mk-19 Cleanup Agreement), Figure R - 15, must be completed prior to receiving permission to fire the Mk-19

(8) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R.

f. CONFLICTS:

(1) Range 47A - Down Range Area

(2) Range 53 - Down Range Area

Figure E - 63 Range 47B - Trenton (American Revolution)

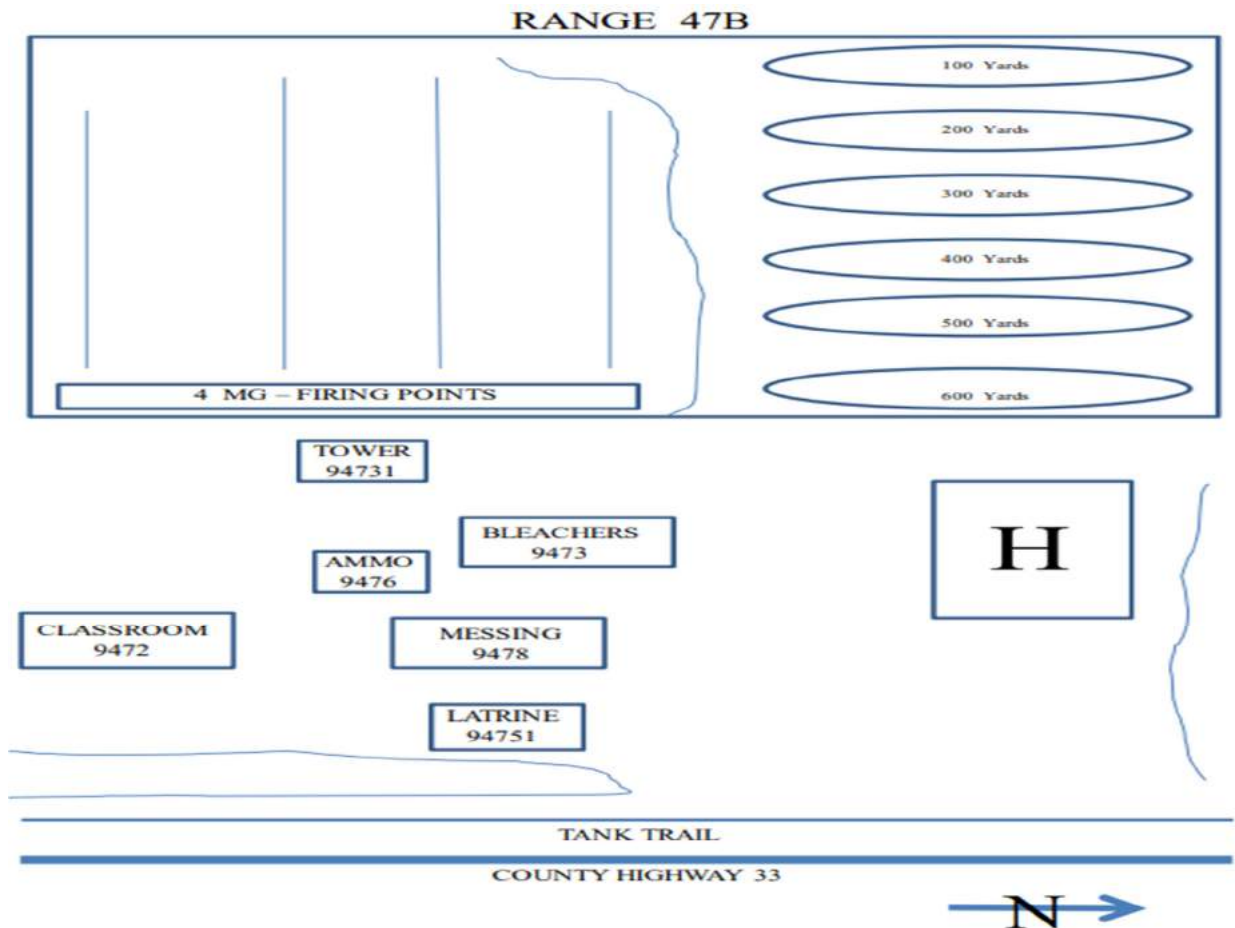




Table E - 69. Range 53 - Vera Cruz (Mexican American)

a. LOCATION: Located at coordinate WK481284, Map 1:50,000, DIXJMTTC 001, June 2006, 13.6 miles from ASA Dix Headquarters on County Highway 33.

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 1.1 miles, the range is on your left.

c. CAPABILITIES:

- (1) Primary: Demolition Training
- (2) Alternate: None
- (2) Ammunition Capability: Common Demolition Material

d. FACILITIES AVAILABLE:

- (1) 2 Demolition Viewing Bunkers
- (2) Classroom
- (3) Ammunition Issue Building
- (4) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Personnel not actively engaged in demolition operations will remain in the Viewing Bunkers.
- (2) Blasting caps and demolition material will be stored and transported separately.
- (3) The detonation area will be clear of rocks and debris for a radius of 30 meters around the demolition site.
- (4) When using shape charges, they will be oriented directly down or into the impact area.

(5) Range limit is 25 lbs. to include donor charges; any request to exceed the explosive weight will include fragmentation distance calculations and protective measures to be used. The range safety officer will approve the request or find an alternate location for the disposal operation.

(6) All demolition charges will be dual primed.

(7) The following waiting periods are mandatory before investigating misfires.

<u>Type Initiation</u>	<u>Wait Time</u>
Non-Electric	45 Minutes
Electric-Surface Charge	None
Electric-Subsurface Charges	45 Minutes

(8) Non-Electric Initiators will be prepared a minimum of 15 feet from other explosives.

(9) Test burning Time-Fuse will be conducted a minimum of 15 feet from other explosives.

(10) Prior to detonation an audible warning will be transmitted three (3) times to alert personnel of an impending detonation.

(11) The firing desk will be notified five (5) minutes prior to detonations in order to ensure airspace is cleared and immediately after detonation to ensure all personnel are safe. If the firing desk does not receive all clear notification within five minutes of expected detonation time a range representative will be dispatched to investigate.

(12) All non-organic (metal, plastic, and paper) will be policed prior to requesting clearance.

(13) A police call of the range will be conducted prior to inspection and all UXOs kicked out from the demolition operation will be marked and reported to the firing desk. EOD will be requested to respond and determine further action.

(14) Three entry control points (ECPs) will be established and manned during demo operations; sawhorses are stored in the ammo point.

f. CONFLICTS:

(1) Range 47B - Down Range Area

(2) Range 55 - Down Range Area

Figure E - 64 Range 53 - Vera Cruz (Mexican American)

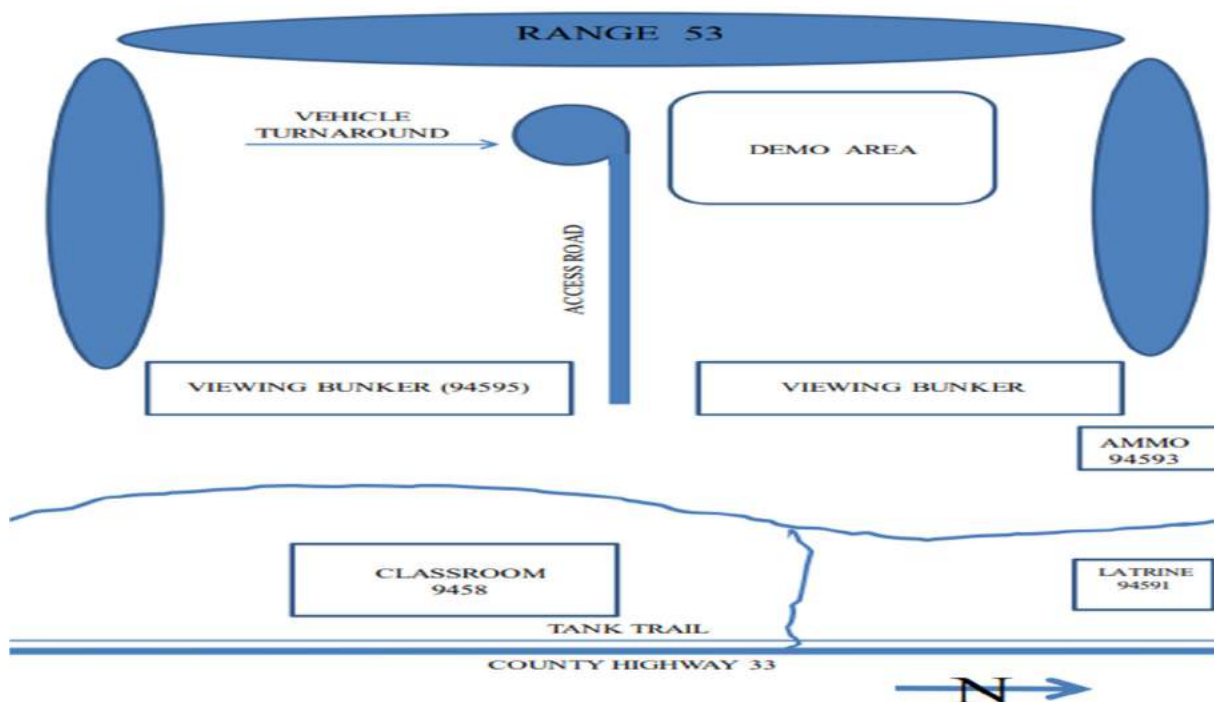






Table E - 70. Range 55 - Anzio (WW II)

a. LOCATION: Located at coordinate WK481286, Map 1:50,000, DIXJMTTC 001, June 2006, 13.7 miles from ASA Dix Headquarters on County Highway 33.

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 1.2 miles, the range is on your left.

c. CAPABILITIES:

- (1) Primary: Demolition Training
- (2) Alternate: None
- (3) Ammunition Capability: Common Demolition Material

d. FACILITIES AVAILABLE:

- (1) 2 Demolition Viewing Bunkers
- (2) Ammunition Issue Building
- (3) Portable Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Personnel not actively engaged in demolition operations will remain in the Viewing Bunkers.
- (2) Blasting caps and demolition material will be stored and transported separately.
- (3) The detonation area will be clear of rocks and debris for a radius of 30 meters around the demolition site.
- (4) When using shape charges, they will be oriented directly down or into the impact area.

(5) Range limit is 25 lbs. to include donor charges; any request to exceed the explosive weight will include fragmentation distance calculations and protective measures to be used. The USASAFD Range Safety Officer will approve the request or find an alternate location for the disposal operation.

(6) All demolition charges will be dual primed.

(7) The following waiting periods are mandatory before investigating misfires.

<u>Type Initiation</u>	<u>Wait Time</u>
Non-Electric	45 Minutes
Electric-Surface Charge	None
Electric-Subsurface Charges	45 Minutes

(8) Non-Electric Initiators will be prepared a minimum of 15 feet from other explosives.

(9) Test burning Time-Fuse will be conducted a minimum of 15 feet from other explosives.

(10) Prior to detonation an audible warning will be transmitted three (3) times to alert personnel of an impending detonation.

(11) The firing desk will be notified five (5) minutes prior to detonations in order to ensure airspace is cleared and immediately after detonation to ensure all personnel are safe. If the firing desk does not receive all clear notification within five minutes of expected detonation time a range representative will be dispatched to investigate.

(12) All non-organic (metal, plastic and paper) will be policed prior to requesting clearance.

(13) A police call of the range will be conducted prior to inspection and all UXOs kicked out from the demolition operation will be marked and reported to the firing desk. EOD will be requested to respond and determine further action.

(14) Three entry control points (ECPs) will be established and manned during demo operations; sawhorses are stored in the ammo point.

f. CONFLICTS: Range 53 - Down Range Area

Figure E - 65 Range 55 - Anzio (WW II)

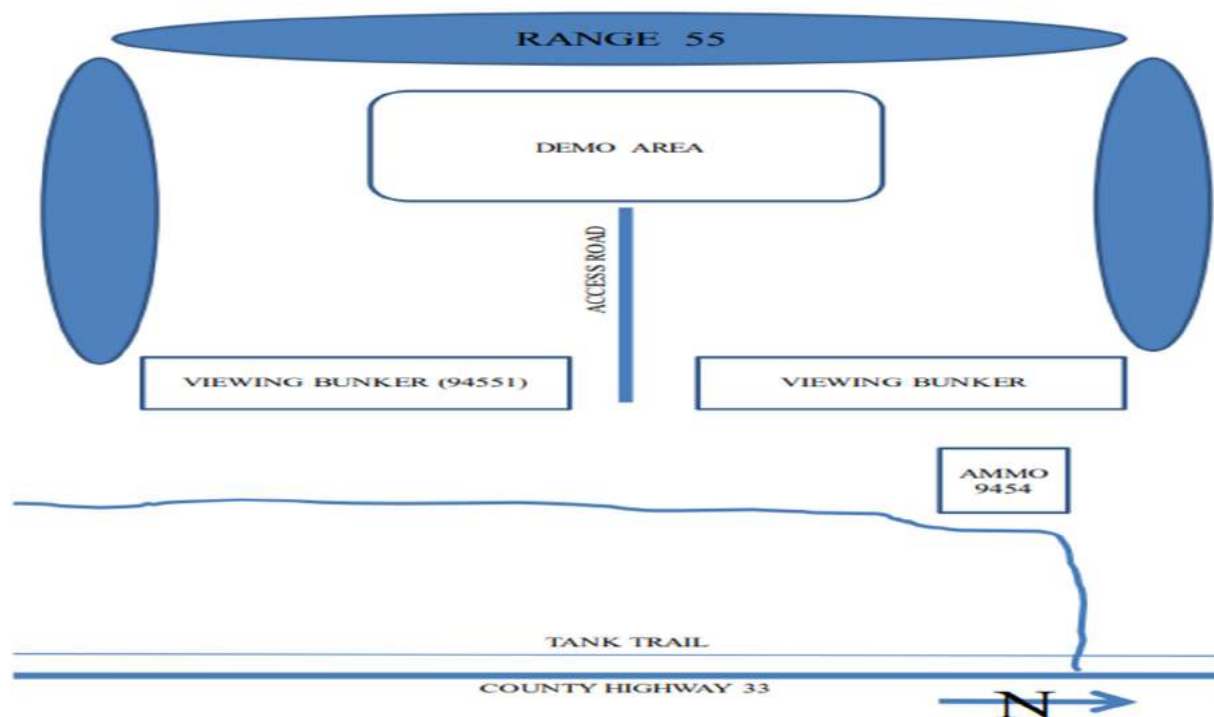






Table E-71 Range 59A - Normandy (WW II)

a. LOCATION: Located at coordinate WK464283, Map 1:50,000, DIXJMTTC 001, June 2006, 14.4 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 2.3 miles. Turn left into access road for Range 59 Complex at the corner with 59 Complex HQ make left onto trail follow to corner make right follow trail to Range 59A

c. CAPABILITIES:

- (1) Primary: Live Fire Shoot House
- (2) Alternate: 25 Meter Range for Reflexive Fire
- (3) Ammunition Capability: Standard Pistol, shotgun (breaching only) powdered metal, 5.56mm

d. FACILITIES AVAILABLE:

- (1) Single story live-fire shoot house with observation catwalk
- (2) Range Operations Center w/AAR Capability
- (3) Classroom
- (4) Ammo Issue Building
- (5) Portable Latrines

e. SPECIAL INSTRUCTIONS:

(1) Range 59A Live Fire Shoot House is available for military organizations whose mission essential task list (METL) require them to perform building clearance missions, and federal and civilian law enforcement agencies

(2) Range Restrictions:

(a) No indiscriminate firing, no burst firing with automatic weapons. All rounds will be contained in portable bullet traps as described in target positioning diagram you submit and approved by ASA Range Safety. Silhouettes can be stapled to the bullet traps to aid in realism

(b) Military units are authorized use of M9 pistol, M4 carbine, M16A2 and shotguns. No concussion or fragmentation grenades may be used. The M249 SAW, M60 or M240B **WILL NOT** be fired in the shoot house under any circumstances. Law enforcement agencies are authorized comparable weapons

(c) No tracer ammunition will be used

(d) Target placement will be coordinated with Range Control, a schematic is available in Appendix R, required documents. No weapons will be pointed or fired above shoulder height. A **red** line on all walls is the upper range limit. No targets will be placed closer than 1 meter from room doorway entrances or within 1 meter of live fire participants. Targets **WILL NOT** be bypassed to reduce the risk of accidentally shooting a fellow soldier.

(3) If an unsafe act is observed in the Shoot House an alarm can be activated from portable switches to stop training, an audible cease fire alarm will sound, and the overhead white lights will activate indicating cease fire. The unsafe act will be corrected prior to resuming training.

(4) There are four breach doors in the facility; the initial entry door and three interior doors are set up with a spring-loaded breakaway system. Breaching can be conducted by use of mechanical/manual means or shotgun via special breach doors with wooden dowel positioned in deadbolt. Hollow Core Doors **WILL NOT** be used for breaching

(5) Range Planning:

(a) A site visit is highly recommended prior to initiating your planning to become familiar with the facility and aid in target placement planning. Site visits can be arranged by contacting the Firing Desk at 609-562-4600.

(b) Range 59A requires an OIC in the grade of E-7 and above and the minimum rank of RSO is E-6 or above.

(c) The Battalion Commander/Civilian Senior Training Officer will submit in writing that the following prerequisite requirements have been met.

(1) A by name list roster of all personnel participating in the live fire training

(2) Commander's Risk Assessment

(3) All firers will have qualified with their assigned weapons within the previous six months, and they have completed reflexive live fire training/turn & shoot, move & shoot within the preceding 15 days. If training will be conducted under limited visibility conditions or with night vision optics, you must also conduct familiarization firing under the same conditions within the preceding 15 days of the shoot house. Weapons qualification must be conducted to your respective services standards.

(4) Military Operations in Urban Terrain (MOUT) must be conducted within 45 days prior to shoot house execution for all military units. Range 12, Range 86 and Ranges 59E and 59F are acceptable locations to conduct this training. Range 59A is not authorized for force-on-force training.

(5) Target placement during all firing scenarios will be IAW target placement overlay approved by the USASA Range Safety additions or alteration to the target placement is authorized with USASA Range Safety approval

(d) Units will have a Combat Life Saver (CLS), Basic Life Saving (BLS) for civilian agencies, with current qualifications, on standby at the control room with CLS bag. CLS personnel will perform lifesaving first aid measures until the range ambulance arrives for transport; CLS will accompany injured personnel with gunshot wounds to the hospital other type injuries will require a unit determination on whether the patient is accompanied. **IN THE EVENT OF A GUNSHOT INJURY OF ANY KIND TRAINING WILL CEASE AND FORT DIX SAFETY PERSONNEL AND DOD POLICE WILL RESPOND TO INVESTIGATE! No one will leave the range until the investigation is complete.**

(e) When planning remember to schedule time for walk through and dry fire exercises prior to live fire. They are mandatory and must be successfully conducted prior to beginning live fire

(f) Cleanup of the range will be conducted prior to releasing your organization; all brass will be policed, a vacuum is supplied to clean up all floors, a Safety Hazard of lead dust exists when using a broom to sweep under no circumstances will the floors be swept in a shoot-house

(6) Range Training Execution

(a) Prior to each entry into the facility (live fire or not) the OIC or RSO will conduct a walkthrough of the facility to ensure no unauthorized personnel are present, the environmental system is running, and all conditions are safe for personnel training at the facility. All targets must be checked to ensure they are in the approved positions and are placed so all rounds hit into pre-designated impact areas avoiding possible ricochet

(b) Ensure everyone entering the shoot house is in proper uniform.

(1.) A Kevlar/ACH

(2.) Approved ballistic eye protection

(3.) Hearing protection

(4.) Individual Body Armor (IBA) must be worn in the live fire facility for all training. Ensure the body armor is in serviceable condition, fits the individuals properly and is of sufficient protection level to stop the rounds used in training.

(c) When weapons have previously been used for force-on-force training they tend to develop a buildup of plastic and jams will occur when firing ball ammunition, so all weapons will be cleaned prior to using live fire

(d) All weapons and personnel will be checked to ensure only authorized ammunition, weapons and equipment enters the facility for the current scenario. If any participants leave the area and return or new shooters arrive, they must be checked or rechecked. At no time will two types of ammunition or weapons be carried into the facility

(e) Only use approved weapons and ammunition; testing has shown these rounds will remain in the confines of the facility when fired in designated areas. Unauthorized weapons or ammunition could breach or damage the facility causing irreversible damage or death

(f) When lasers are used during any training all procedures outlined in ASAD Pam 350-3- chapter Q. will be adhered to

(g) A guard will be posted at the fence to control access to the facility; no one will be allowed entry when clearing operations are under way

(h) All participants will complete a walk through and a dry fire for each scenario prior to actual live fire. Anyone not demonstrating proficiency during dry fire will not be allowed to participate in live fire until they have mastered the training during a dry fire exercise. The bottom line is **“SAFETY,”** only risk what you are willing to lose

(i) Execution of the exercise submitted in your plan to range control is the only training authorized. If during your walk through and dry fire phase you wish to change the training plan you must request and receive approval from either the range officer or range safety officer. Training such as initial entry, room clearing, and movement techniques are some of the critical skills that can effectively be taught in the live fire facility

(j) Strict compliance with shoot-house instruction is mandatory; failure to comply will be reason for immediate removal from facility and denial of use in the future

f. CONFLICTS: Range 59F station 3, grenadier

Figure E - 66 Range 59A - Normandy (WW II)

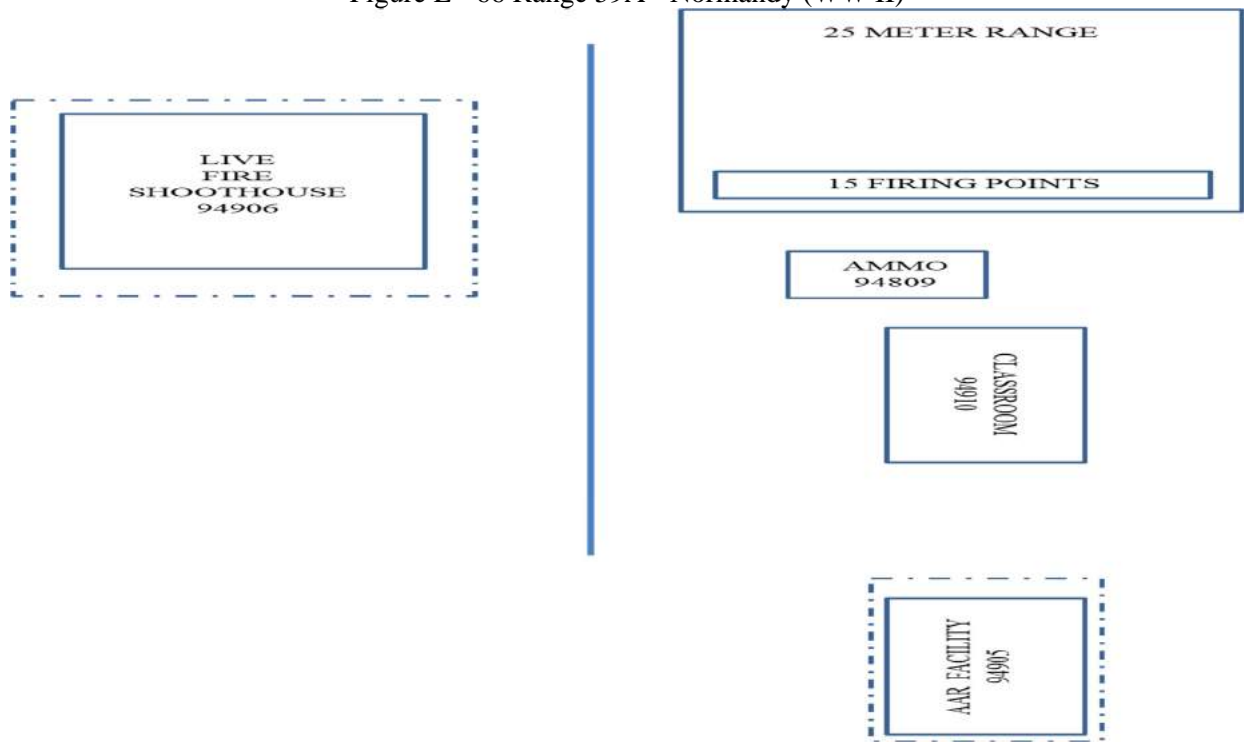


Figure E - 67 Range 59A (Interior)

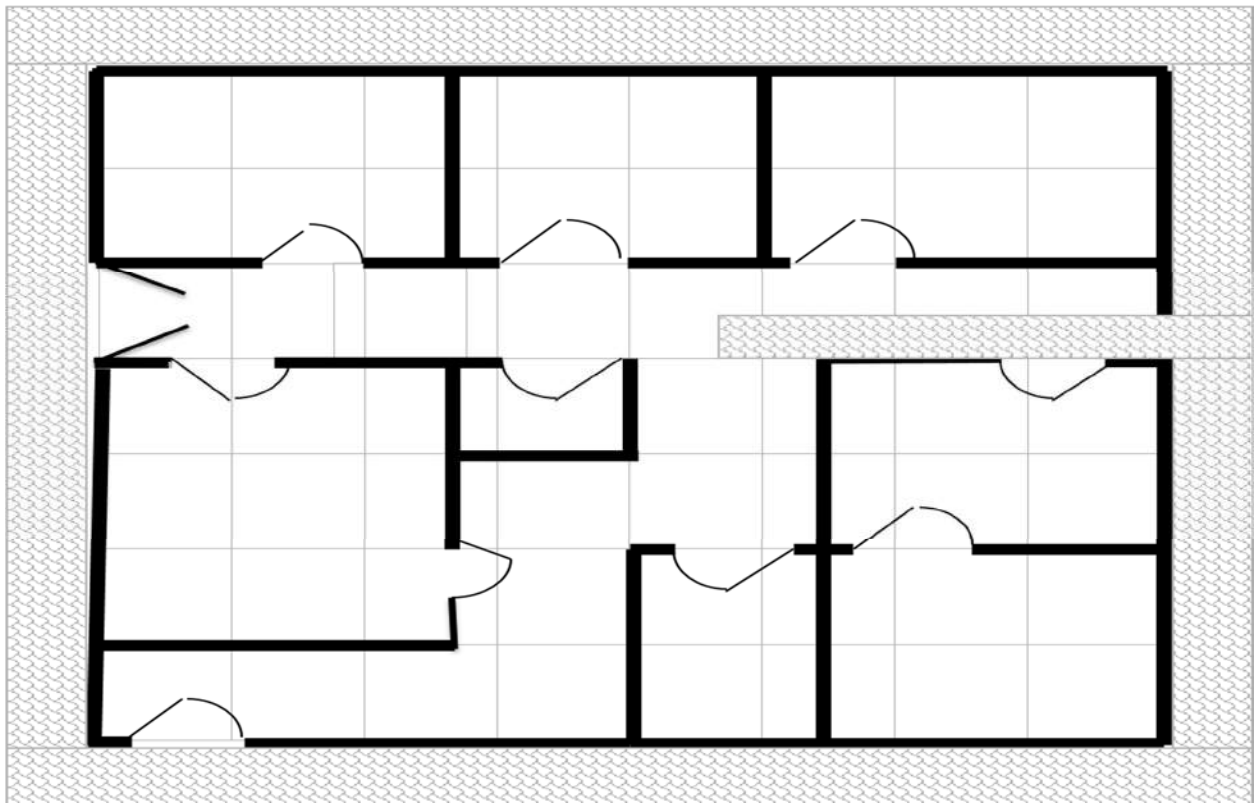






Table E - 72. Range 59B - Utah (WW II)

a. LOCATION: Located at coordinate WK466291, Map 1:50,000, DIXJMTTC 001, June 2006, 14.4 miles from ASA Dix Headquarters on County Highway 33

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 2.8 miles turn left onto access road for Normandy Complex range is .6 miles follow access road bearing left past Bivouac 20

c. CAPABILITIES:

- (1) Primary: Battalion TOC location for staff exercises
- (2) Alternate: None
- (3) Ammunition Capability: Pyrotechnics and Blank Ammunition

d. FACILITIES AVAILABLE:

- (1) Classroom (2)
- (2) Bleacher Enclosure
- (3) Covered Mess
- (4) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) Only blank ammunition authorized for use
- (2) Pyrotechnics will be strictly controlled due to the proximity of adjacent ranges

f. CONFLICTS: None

Figure E - 68 Range 59B - Utah (WW II)

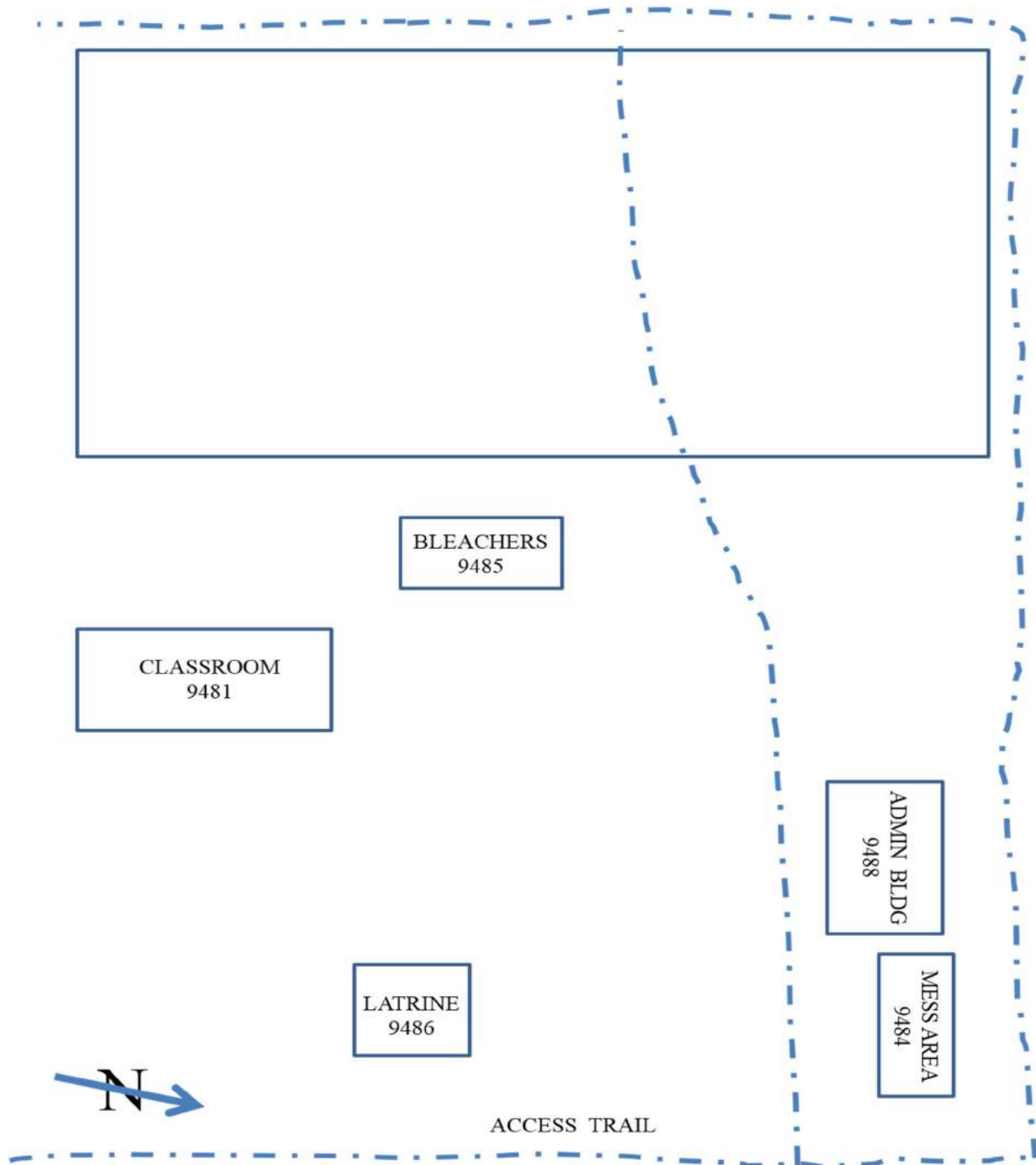






Table E - 73. Range 59C - Cherbourg (WW II)

a. LOCATION: Located at coordinate WK463292, Map 1:50,000, DIXJMTTC 001, June 2006, 14.4 miles from ASA Dix Headquarters on County Highway 33.

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 2.8 miles turn left onto access road for Normandy Complex range is .6 miles follow access road bearing right past Bivouac 20.

c. CAPABILITIES:

- (1) Primary: Infantry Weapons Demonstration Range
- (2) Alternate: Artillery/Mortar Observation Point; Direct Lay Firing Point for Mortars and Artillery
- (3) Ammunition Capability: Standard Pistol, Shotgun, 5.56, 7.62, .50, 40mm, LAW, AT-4, SMAW, Claymore, TOW, Demolitions and Mortars 60mm, 81mm, Artillery (Direct Lay)

d. FACILITIES AVAILABLE:

- (1) Firing Point/Stations for all above listed systems.
- (2) Elevated Tower
- (3) Classroom Capacity
- (4) Ammunition Issue Building
- (5) Bleacher Enclosure

(6) Latrine

e. SPECIAL INSTRUCTIONS:

(1) The following topics will be included in all range safety briefings prior to beginning weapons firing:

(a) The specific targets appropriate for the weapon system and right and left range limits for the weapons that will be fired; an SDZ will be provided depicting firing points and target points for weapon systems M2 .50 cal, missiles, rockets and indirect weapon systems; guarantee no cross-range firing occurs.

(b) Specific Instructions for misfires

(c) Minimum 40mm engagement distance by weapon

(d) Back-blast area for any weapon system producing a back-blast

(2) Personnel are only authorized to proceed down range as far as the target frame boots without range control escort. This is a dudded range and a UXO hazard exists.

(3) Personnel are not authorized to conduct multiple weapon system simultaneous firing, combined fire demonstration, without first obtaining USASAFD Range Safety Officer approval. Lesson plan with risk assessment will be completed and submitted for approval prior to training.

(4) Assign one assistant instructor for every two (2) machineguns.

(5) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual.

(6) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon.

(7) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal.

(8) Weapons can be fired from the tripod, ground mounts and vehicle ring mounts.

(9) For High Explosive ammunition the M203 has a minimum engagement distance of 310 meters between the target impact area and the firing line; the Mk-19 has a minimum engagement distance of 400 meters between the target impact area and the firing line.

(10) Discontinue firing 40mm ammunition when ground winds are in excess of 30 mph.

(11) 40 mm rounds failing to detonate once fired into the impact area do not need to be reported to Range Control; 40 mm ammunition misfires will be removed from the weapon and placed into a metal container, marked as misfired and turned into the ASP.

(12) This range is laser safe for use in tracking, distancing and designating down range targets in support of live fire munitions. Personnel will maintain and operate all laser devices as potential weapons and will only laser targets in the Impact Area. Aircraft can be seen in the distance from Range 59C firing points approaching McGuire for landings, special care should be used not to interfere with aircraft traffic patterns.

(13) Any organization requesting to use demolitions, anti-armor weapons or antipersonnel landmines (Claymore, M18) will submit a lesson plan with risk assessment to USASAFD Range Safety Officer for approval prior to conducting training.

f. CONFLICTS:

Figure E - 69 Range 59C - Cherbourg (WW II)

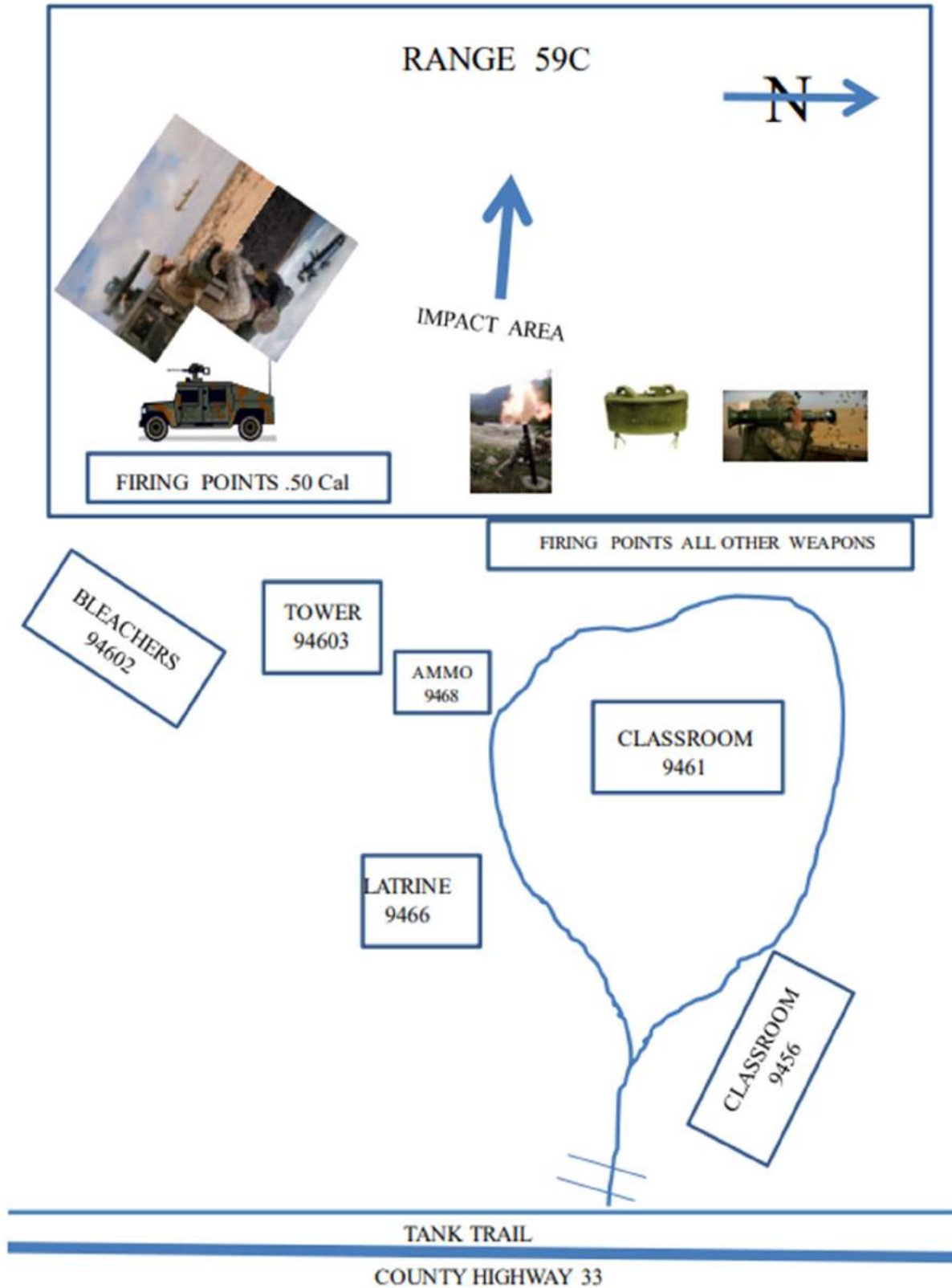




Table E - 74. Range 59D - Pointe Du Hoc (WW II)

a. LOCATION: Located at coordinate WK462296, Map 1:50,000, DIXJMTTC 001, June 2006, 14.4 miles from ASA Dix Headquarters on County Highway 33

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles to Times Square, turn north on County Road 33 for 2.8 miles turn left onto access road for Normandy Complex range is .6 miles follow access road bearing right past Bivouac 20

c. CAPABILITIES:

- (1) Primary: Multipurpose Weapons Training
- (2) Alternate: Mortar Firing Point
- (3) Ammunition Capability: Standard Pistol, Shotgun, 5.56 and 7.62., 60mm, 81mm

d. FACILITIES AVAILABLE:

- (1) Firing Points:
- (2) Classroom
- (3) Ammunition Issue Building: 2
- (4) Covered Mess
- (5) Latrine

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: Observation Point 59C

Figure E - 70 Range 59D - Pointe Du Hoc (WW II)

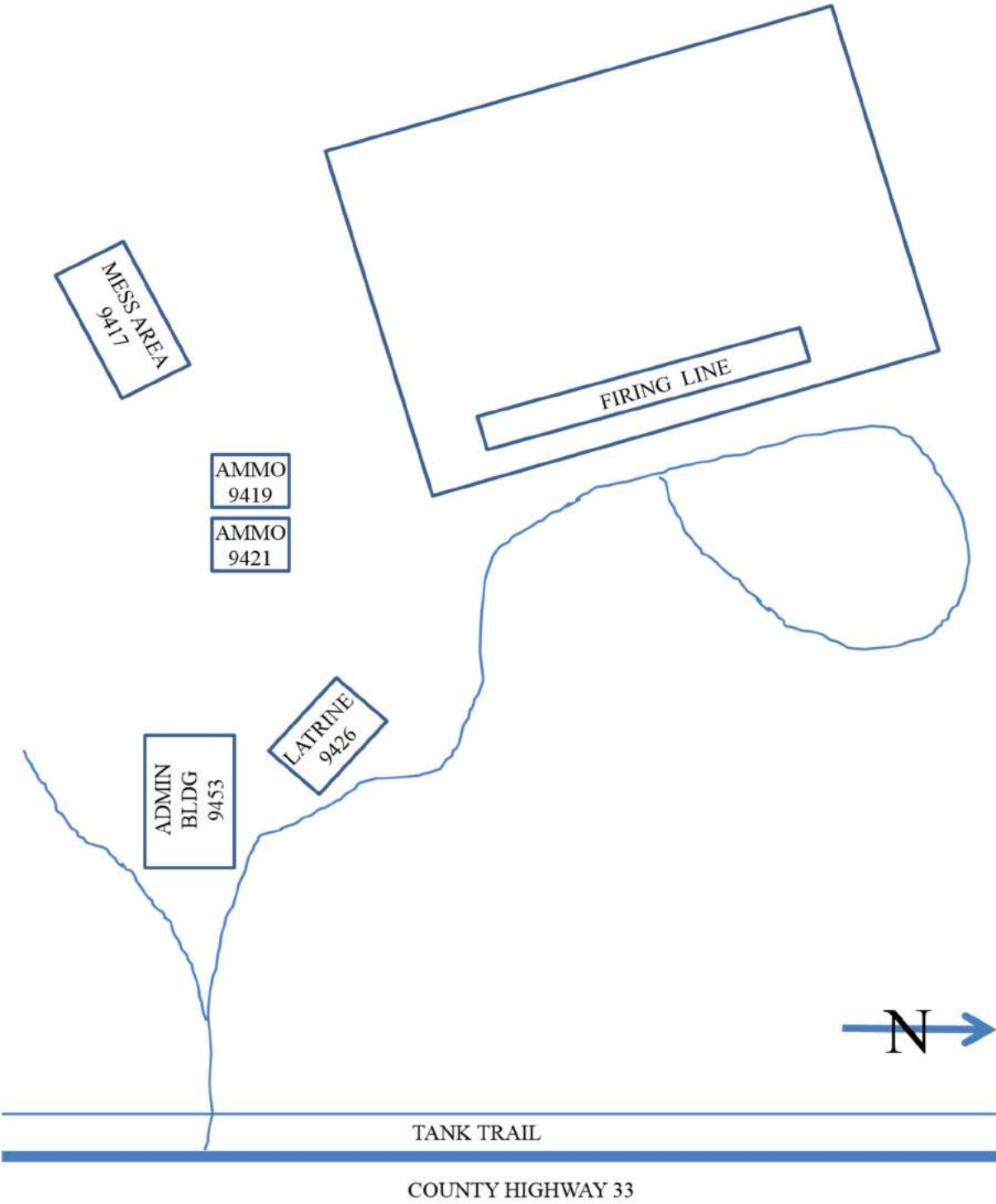






Table E - 75. Range 59E – Omaha Beach (WW II)

a. LOCATION: Located at coordinate WK469287, Map 1:50,000, DIXJMTTC 001, June 2006, 14.4 miles from Post Headquarters on County Highway 33

b. DIRECTION: Drive south on Texas Avenue. Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 1.9 miles. Turn left into access road for Range 59E

c. CAPABILITIES:

- (1) Primary: Collective Training Facility (CTF)
- (2) Alternate: None
- (3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Simunitions, Pyrotechnics

d. FACILITIES AVAILABLE:

- (1) Nine MOUT Buildings; Gas Station, Warehouse, Two-Story Office Building, Three-Story Hotel, Police Station, Bank, Church, two One-Story Business Buildings; Passenger Train with Platform
- (2) Classroom
- (3) Bleacher Enclosures (2)
- (4) Covered Mess
- (5) Portable Latrine
- (6) Rappel Locations on Hotel Roof (Rappel Master on Site as Safety)



e. SPECIAL INSTRUCTIONS:

(1) Personal Protective Equipment covering all exposed skin, helmets, hearing and ballistic approved eyewear, throat protection (full face mask) are required for all personnel entering facility during use of CCMCK

(2) Pyrotechnics are not authorized inside of structures but may be used outside of buildings

(3) Inspection of Range 59E is by appointment between 0800 and 1530 daily, plan for 1 hour to conduct joint inspection, particular attention will be paid to the following areas.

(a) All markings from CCMCK and simunitions will be removed from structures

(b) All furniture moved or emplaced will be returned to original configuration

(4) Request to utilize the AAR facility will be addressed on a case-by-case basis

f. CONFLICTS: None.

Figure E - 71 Range 59E – Omaha Beach (WW II)

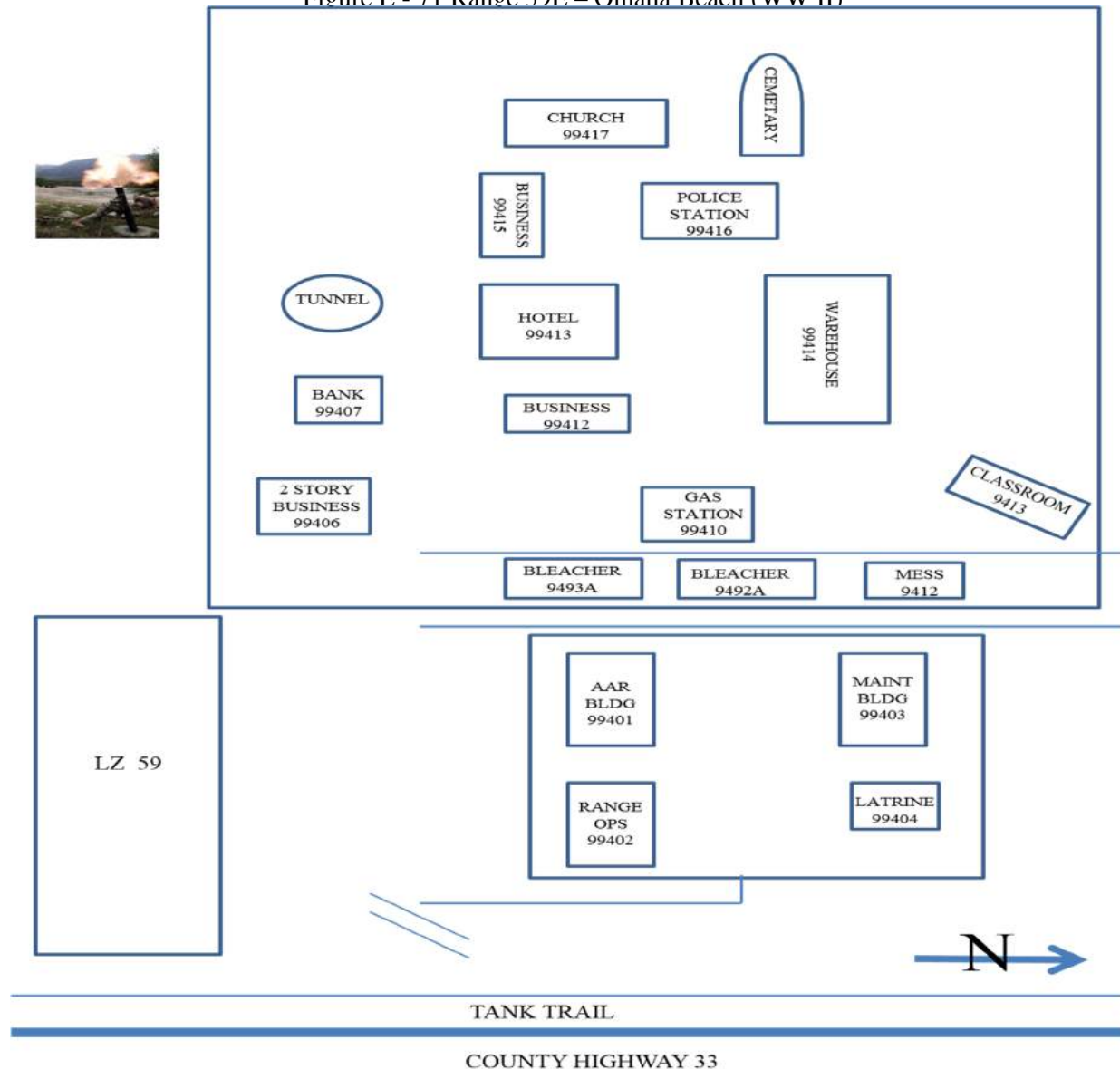




Table E - 76. Range 59F - Urban Assault Course (UAC)

a. **LOCATION:** Located at coordinate WK464283, Map 1:50,000, DIXJMTTC 001, June 2006, 14.4 miles from ASA Headquarters on County Highway 33

b. **DIRECTIONS:** Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 2.3 miles. Turn left into access road for Range 59 Complex at the corner with 59 Complex HQ make left onto trail follow to corner make right follow trail to Range 59F

c. **CAPABILITIES:**

(1) Primary: Individual/Team/Squad/Platoon Urban Warfare Training.

(2) Alternate: None

(3) Ammunition Capability:

(a) Stations 1, 2, 4, 5 - Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions.

(b) Station 3 - 5.56mm and 40mm TPT

d. **FACILITIES AVAILABLE:**

5 Stations:

(a) Station 1 - Individual/Team

(b) Station 2 - Squad/Platoon

(c) Station 3 - Grenadier

(d) Station 4 - Offense/Defense

(e) Station 5 - Underground/Tunnel

e. SPECIAL INSTRUCTIONS:

- (1) Smoke and Pyrotechnics are not authorized for use inside any structures
- (2) To use 5.56 ball on station 3 a CONOP will be developed and SDZ's developed before approval for use

f. CONFLICTS:

- (1) MFP 6
- (2) Range 59A, 25-meter range

Figure E - 72 Range 59F - Urban Assault Course (UAC)

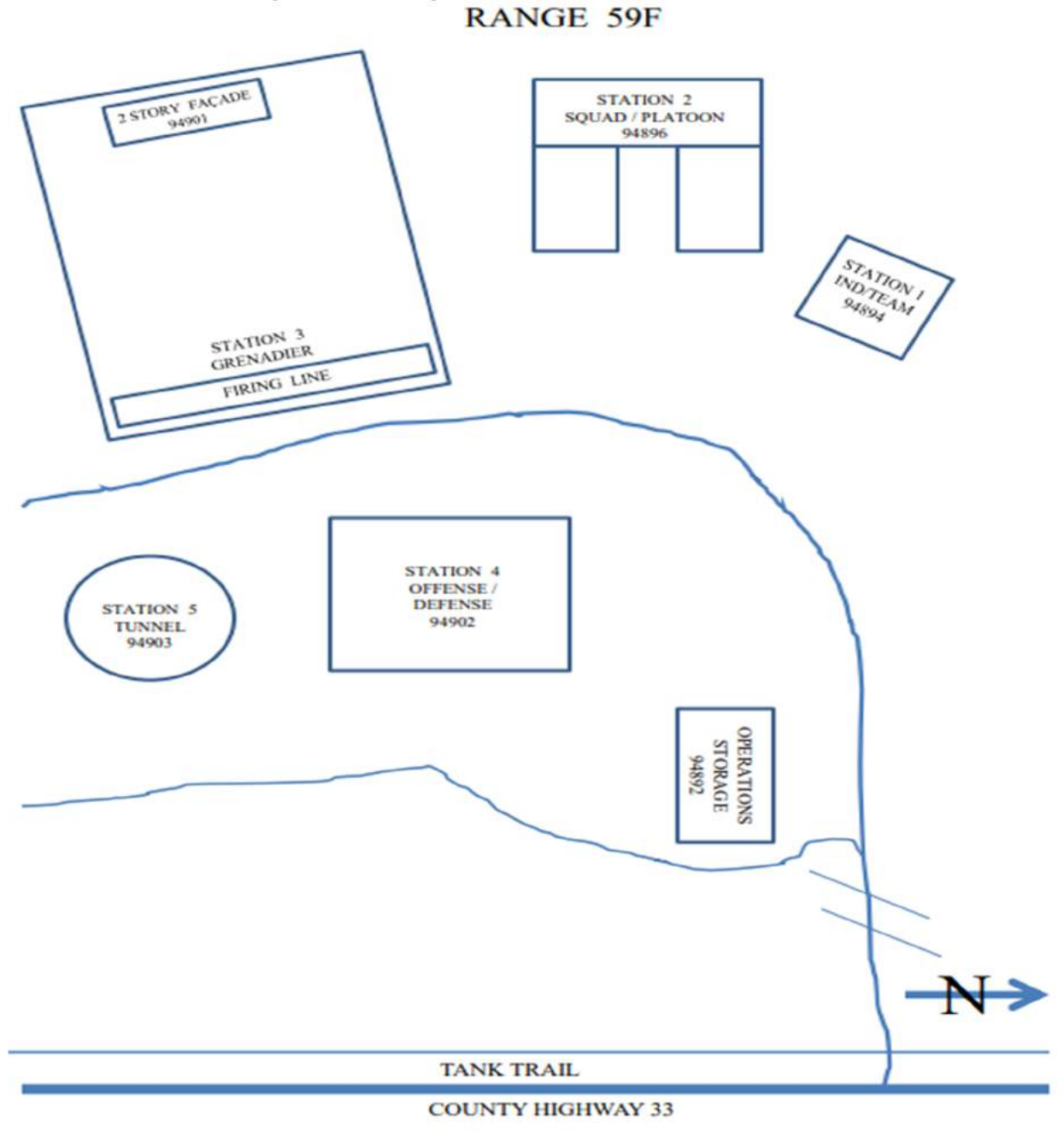




Table E - 77. Range 61 - Kimpo (Korea)

a. LOCATION: Located at coordinate WK466303, Map 1:50,000, DIXJMTTC 001, June 2006, 15.2 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 3.5 miles, the entrance to the range is on your left

c. CAPABILITIES:

(1) Primary: Automated Infantry Squad Battle Course (ISBC) consists of two dismounted live fire assault lanes separated by limit markers with multiple engagement locations containing both infantry and armor stationary and moving targets; capable of battlefield sound and smoke effects simulation with unit supplied pyrotechnics. Authorized weapons include the M-9, M-4, M-249, M240B, M203 grenade launcher with target practice ammunition only and M69 Practice Grenades. Pyrotechnics may be used IAW approved overlay. The lanes are clearly marked with interior and exterior limit markers; there are seven overall objectives. No target will be engaged that would allow rounds to escape the lanes as marked and the approved SDZ of the range. Target engagement requests will be approved by the Range Safety Office prior to any engagement

(2) Alternate: Multi-Purpose Training Range

(3) Ammunition Capability: 5.56, 7.62, .50 cal, 40mm TP, Simulators M34 and M35

d. FACILITIES AVAILABLE:

(1) Firing Points: Infantry Assault Course; 1 Course Road with 3 Battle Positions in support of ISBC or Independent Gunnery

(2) Control Tower Elevated (2)



- (3) Ammunition Issue Building
- (4) Classroom
- (5) Covered Mess
- (7) Bleacher Enclosure
- (8) Latrine

e. SPECIAL INSTRUCTIONS:

(1) The Infantry Squad Battle Course (ISBC) due to the elevated risk involved requires specific pre-operational training requirements be met, these objectives will be documented and provided to the USASAFD Range Safety Officer prior to conducting live fire exercises, the tasks can be accomplished in conjunction with the live fire training event:

- (a) Qualified with assigned weapon within past six months
- (b) Completion of a reflexive fire/move and shoot course within previous 30 days
- (c) Completion of team level live fire movement course within previous 30 days
- (d) Squad level movement walk through, and blank fire course within previous 30 days

(2) A CONOP describing all actions from start to finish covering movements, engagement areas and target selection will be turned into USASAFD Range Safety NLT 10 days prior. A walk thru with the Range Safety and the unit OIC & RSO will be conducted prior to the start of training to validate the exercise

(3) The following uniform is mandatory for all firers and safeties conducting the exercise:

- (a) A Kevlar/ACH
- (b) Approved ballistic eye protection
- (c) Hearing protection
- (d) Individual Body Armor (IBA) ensure the body armor is in serviceable condition, fits the individuals properly and is of sufficient protection level to stop the rounds used in training.

(4) OIC for the ISBC will be in the grade of E-7 or above and the minimum rank of RSO is E-6 or above

- (5) No high explosive munitions will be used
- (6) Only range control personnel are authorized to repair targets
- (7) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual

(8) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon

(9) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal

(10) This range is laser safe for use in tracking, distancing and designating down range targets in support of live fire munitions. Personnel will maintain and operate all laser devices as potential weapons and will only laser targets in the Impact Area. Aircraft can be seen in the distance from Range 61 firing points approaching McGuire for landings, special care should be used not to interfere with aircraft traffic patterns

(11) A minimum distance of 100 meters will be maintained between the Impact Area and the firing line when firing the M203

(12) Units are responsible for marking interior limit markers and firing positions during limited visibility

(13) All personnel will stay clear of targets in and around objectives. Units damaging targets will be issued statement of charges

(14) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R

f. CONFLICTS:

- (1) Range 63

(2) Down range maintenance is not permitted when any of the following ranges are occupied: Rang 59C, Range 59D, Range 63, Range 65, Range 85.

Figure E - 73 Range 61 - Kimpo (Korea)

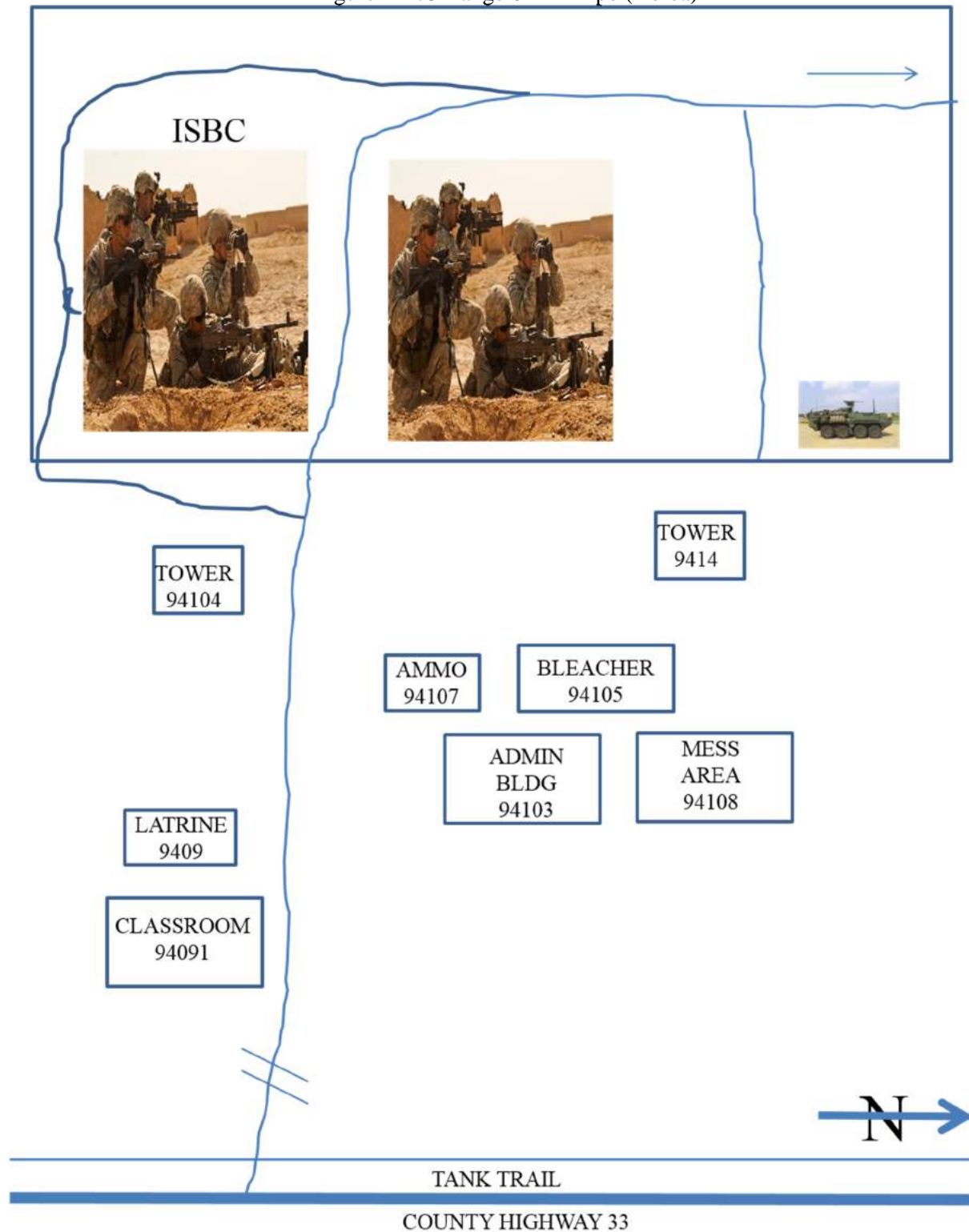




Figure E - 74 Range 61 - Kimpo (Korea) Target Reference Points



TRP-1 (5) SIT

TRP-2 (3) SIT

TRP-3 (5) SIT, (1) SAT, (2) MIT

TRP-4 (3) SIT, (1) SAT, (1) MIT

TRP-5 (4) SIT, (2) SAT, (1) MIT

TRP-6 (3) SIT, (1) SAT, (1) MIT

TRP-7 (1) MAT



Table E - 78. Range 63 - Ardennes-Alsace (WW II)

a. LOCATION: Located at coordinate WK466303, Map 1:50,000, DIXJMTTC 001, June 2006, 15.2 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 3.5 miles, the entrance to the range is on your left, co-located with Range 61

c. CAPABILITIES:

- (1) Primary: 50-meter Multipurpose Range
- (2) Alternate: None
- (3) Ammunition Capability: Standard Pistol 5.56 and 7.62.

d. FACILITIES AVAILABLE:

- (1) Firing Points: 20
- (2) Control Tower Elevated
- (3) Ammunition Point
- (4) Latrine

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: Range 61

Figure E - 75 Range 63 - Ardennes-Alsace (WW II)

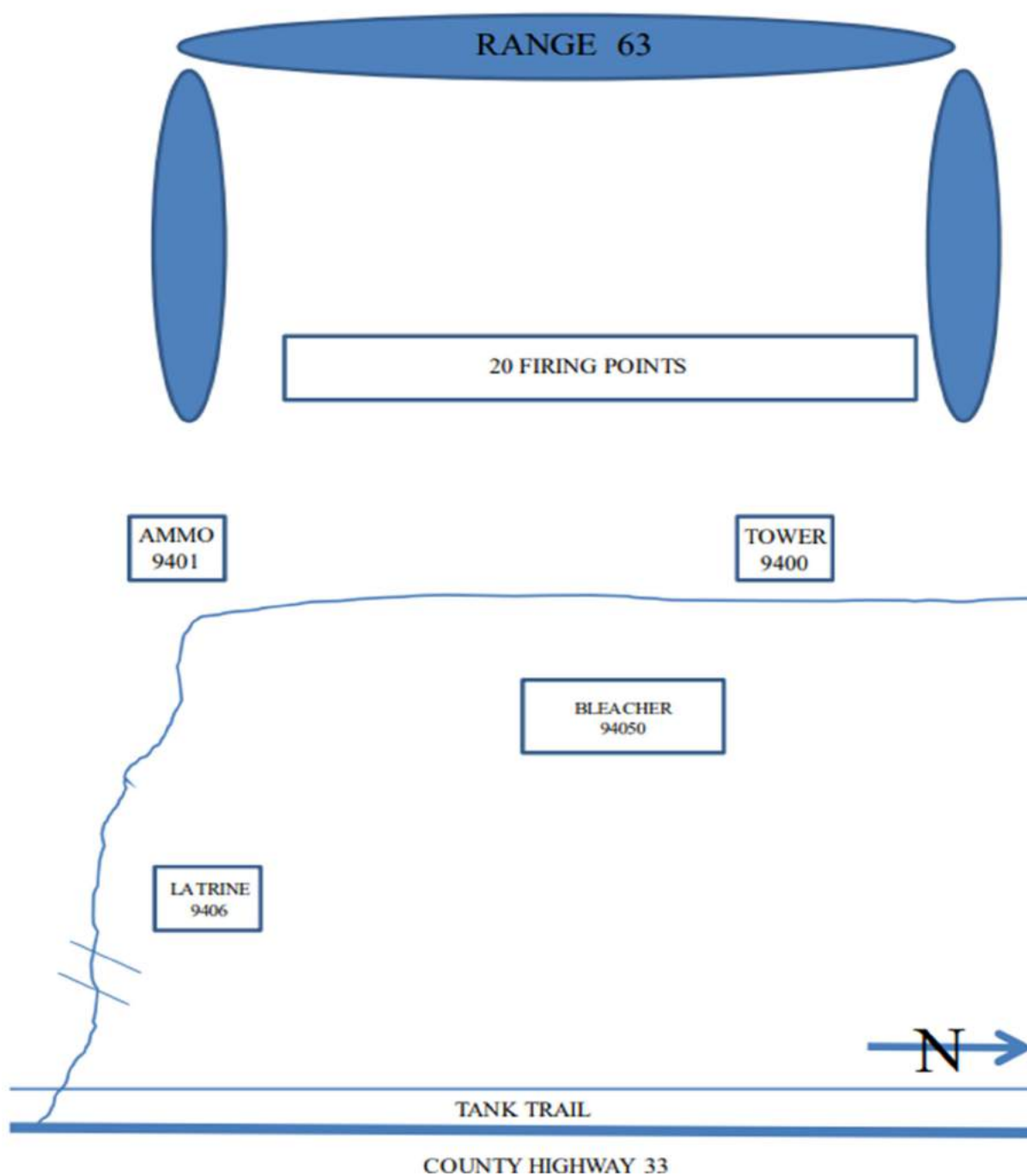




Table E - 79. Range 65 - Bryant Range

a. LOCATION: Located at coordinate WK465313, Map 1:50,000, DIXJMTTC 001, June 2006, 16.2 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 4.1 miles, the entrance to the range is on your left

c. CAPABILITIES:

(1) Primary: Multi-Purpose Range Facility fully automated and equipped with computer-controlled targets capable of varying scenarios and computer scoring. Target distances and primary firing line is arrayed at various distances from 200-1900 meters with infantry and armor stationary and moving targets

(2) Alternate: None

(3) Ammunition Capability: 5.56, 7.62, .50 cal, 20mm TP, TOW Guided Missile TP Only

d. FACILITIES AVAILABLE:

(1) Firing Points:

(a) 6 Battle Positions

(b) 2 Course Roads

(2) Control Tower Elevated

(3) Ammunition Issue Building

(4) Classrooms (2)

(6) Covered Mess

(7) Bleacher Enclosure



(8) Latrine

e. SPECIAL INSTRUCTIONS:

- (1) **No** High Explosive Munitions will be used
- (2) Helmets will be worn by firing crews at all times in vehicles
- (3) Only range control personnel are authorized to repair targets
- (4) A CONOP describing engagements with a shot description sheet will be submitted NLT 10 days prior to training for safety validation. Prior to start of training the unit OIC/RSO will conduct a walk thru to proof the firing with a range control representative. No changes are authorized once validated
- (5) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual
- (6) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon
- (7) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal
- (8) This range is laser safe for use in tracking, distancing and designating down range targets in support of live fire munitions. Personnel will maintain and operate all laser devices as potential weapons and will only laser targets in the Impact Area. Aircraft can be seen in the distance from Range 65 firing points approaching McGuire for landings, special care should be used not to interfere with aircraft traffic patterns
- (9) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R

f. CONFLICTS:

- (1) Personnel are not permitted more than 1500 meters down range when the Main Impact Area is being utilized for Artillery or Mortar Firing
- (2) Personnel are not authorized forward of the firing line when Range 71/Mortar Firing Point 7 is in a Fire Status
- (3) Personnel will not perform maintenance down Range 61

Figure E - 76 Range 65 - Bryant Range

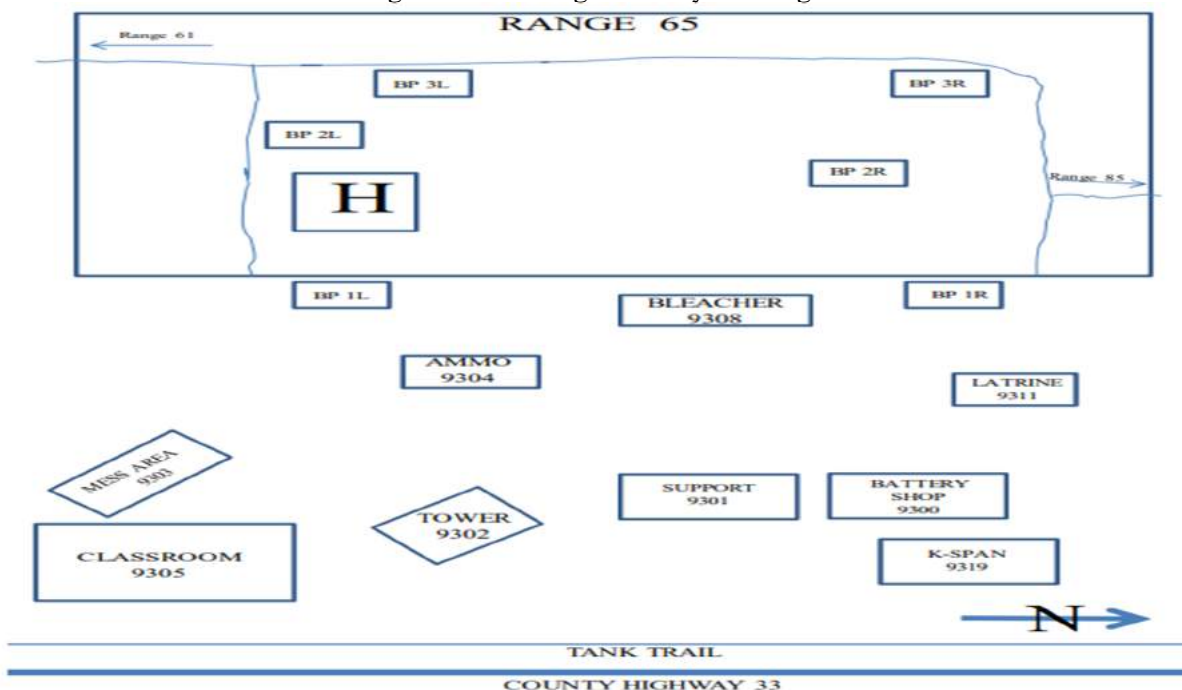




Table E - 80. Range 71 - St. Lo (WW II)

a. LOCATION: Located at coordinate WK462314, Map 1:50,000, DIXJMTTC 001, June 2006, 16.7 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 4.4 miles, the entrance to the range is on your left

c. CAPABILITIES:

- (1) Primary: Mortar Firing Point 7
- (2) Alternate: Less Than Lethal Weapons Training Range
- (3) Ammunition Capability: 60mm, 81mm and 120mm Mortars; Less than lethal ammunition

d. FACILITIES AVAILABLE:

- (1) Firing Points:
- (2) Control Tower Elevated
- (3) Classroom
- (4) Bleacher Enclosure
- (5) Ammunition Issue Building
- (6) Portable Latrines

e. SPECIAL INSTRUCTIONS:



f. CONFLICTS: Down Range 65, Convoy Lane between Range 65 and Range 85.

Figure E - 77 Range 71 - St. Lo (WW II)

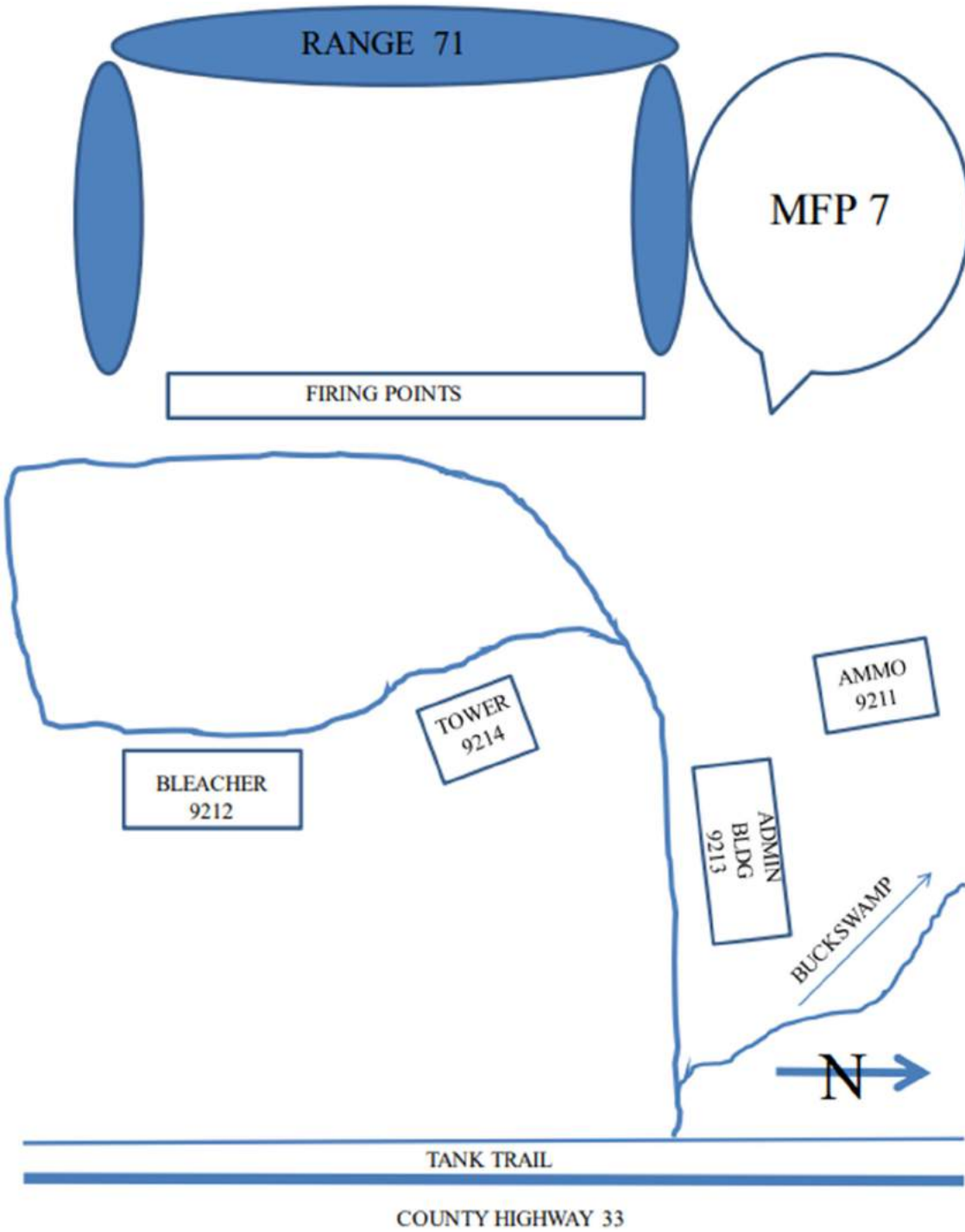




Table E - 81. Range 75 - IA Drang Valley (Vietnam)

a. LOCATION: Located at coordinate WK460316, Map 1:50,000, DIXJMTTC 001, June 2006, 16.9 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 4.7 miles, the entrance to the range is on your left

c. CAPABILITIES:

- (1) Primary: Mortar Firing Point 10
- (2) Alternate: None
- (3) Ammunition Capability: 81mm and 120 mm

d. FACILITIES AVAILABLE:

- (1) Classroom
- (2) Bleacher Enclosure

e. SPECIAL INSTRUCTIONS: None

f. CONFLICTS: Ranges 61 and 65

Figure E - 78 Range 75 - IA Drang Valley (Vietnam)

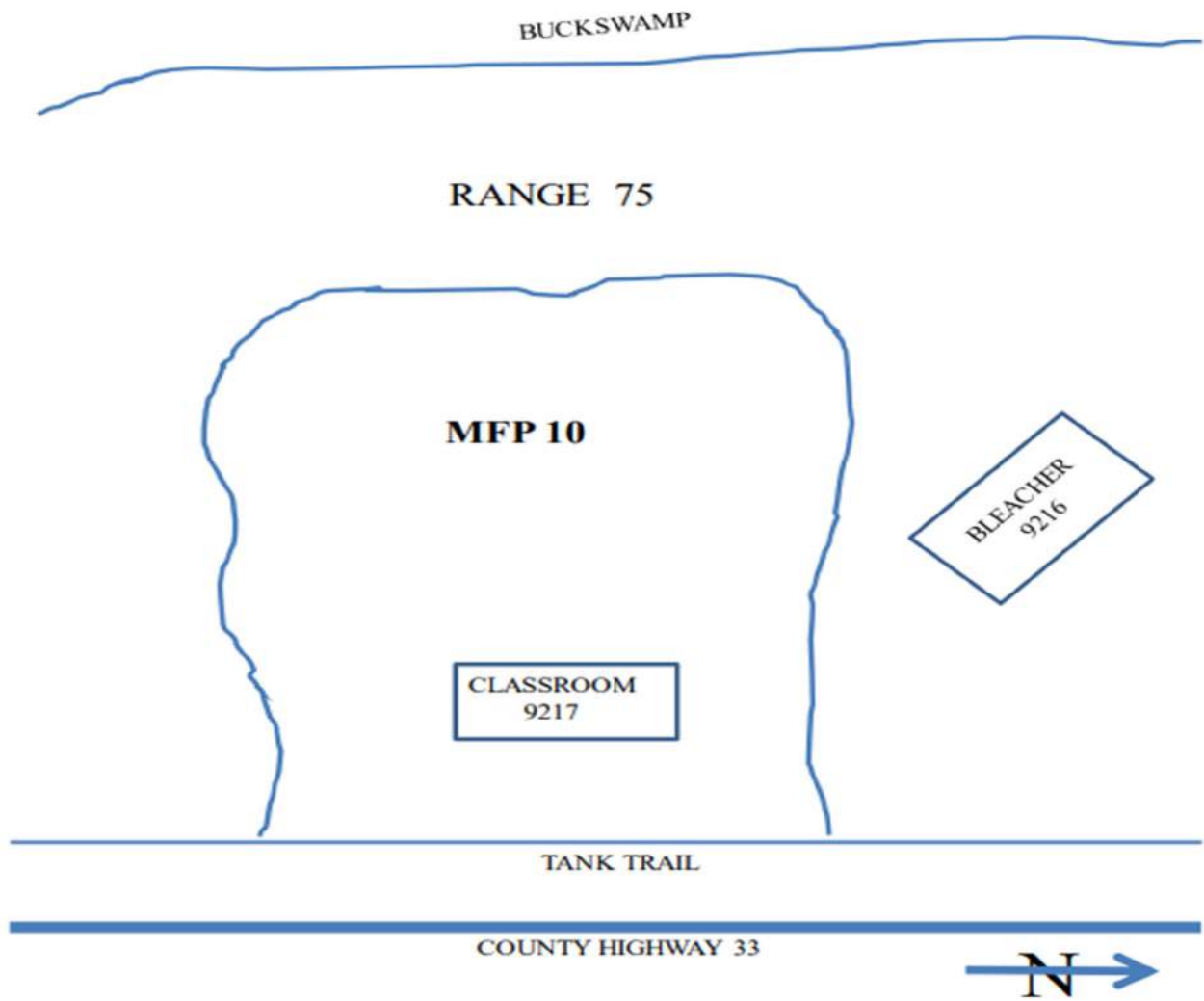




Table E - 82. Range 85 - Rome Arno (WW II)

a. LOCATION: Located at coordinate WK456324, Map 1:50,000, DIXJMTTC 001, June 2006, 17 miles from ASA Headquarters on County Highway 33

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 5 miles, the entrance to the range is on your left

c. CAPABILITIES:

(1) Primary: Multi-Purpose Range Facility fully automated and equipped with computer-controlled targets capable of varying scenarios and computer scoring. Target distances and primary firing line is arrayed at various distances from 200-1900 meters with infantry and armor stationary and moving targets

(2) Alternate: Aerial Gunnery

(3) Ammunition Capability: 5.56, 7.62, .50 cal, 40mm TP, 20mm TP, TOW Guided Missile TP Only

d. FACILITIES AVAILABLE:

(1) Firing Points: 2 Course Roads with 6 Battle Positions

(2) Control Tower Elevated

(3) Ammunition Point

(4) Classroom

(5) Covered Mess

(6) Bleacher Enclosure

(7) Portable Latrine

(8) Permanently Assigned Radio Frequencies: 32.85 MHz and 32.00 MHz

e. SPECIAL INSTRUCTIONS:

- (1) **No** high explosive munitions, rockets or missiles can be used.
- (2) Helmets will be worn by firing crews at all times in vehicles
- (3) Only range control personnel are authorized to repair targets
- (4) A CONOP describing engagements with a shot description sheet will be submitted NLT 10 days prior to training for safety validation. Prior to start of training the unit OIC/RSO will conduct a walk thru to proof the firing with a range control representative. No changes are authorized once validated
- (5) Do not fire the M2 .50 cal machinegun until headspace and timing have been set IAW operators manual
- (6) Machineguns are considered clear when the cover is open, the bolt is to the rear, the safety is on safe, and the gun-crew is standing behind the weapon.
- (7) Maximum elevation of 50 mils will not be exceeded when firing the M2 .50 cal
- (8) This range is laser safe for use in tracking, distancing and designating down range targets in support of live fire munitions. Personnel will maintain and operate all laser devices as potential weapons and will only laser targets in the Impact Area. Aircraft can be seen in the distance from Range 85 firing points approaching McGuire for landings, special care should be used not to interfere with aircraft traffic patterns
- (9) A minimum distance of 400 meters will be maintained between the Impact Area and the firing line when firing the Mk-19
- (10) Units will not fire until they have completed the Automated Range Opening/Clearing Checklist ASAFD Form 2227-R

f. CONFLICTS: Buckswamp Road; Down Range 61; all aerial gunnery.

Figure E - 79 Range 85 - Rome Arno (WW II)

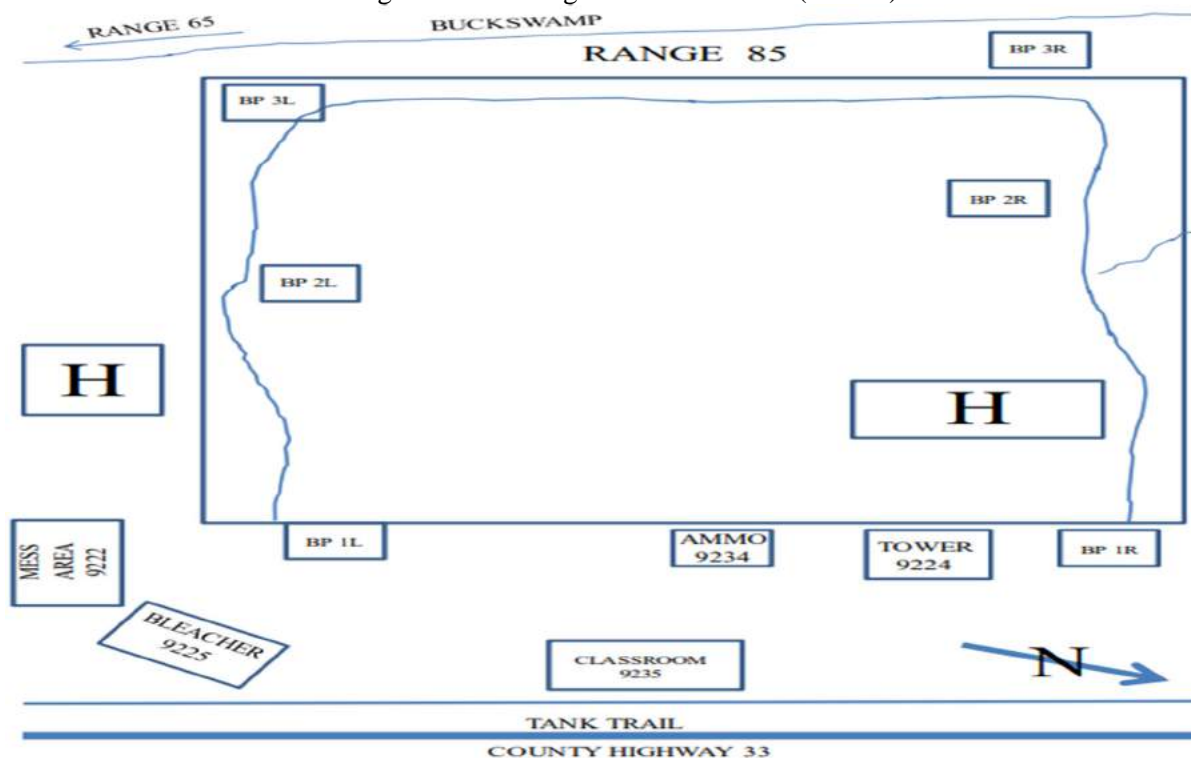






Table E - 83. Range 86 - Buena Vista (Mexican American)

a. LOCATION: Located at coordinate WK458324, Map 1:50,000, DIXJMTTC 001, June 2006, 17 miles from ASA Headquarters on County Highway 33.

b. DIRECTIONS: Drive south on Texas Avenue, Turn east on Range Road for 9.3 miles. Turn north on County Highway 33 for 5 miles, the entrance to the range is on your right.

c. CAPABILITIES:

- (1) Primary: Urban Warfare Training Site
- (2) Alternate: Improvised Explosive Device Defeat Training Site
- (3) Ammunition Capability: Blanks, Close Combat Marking Capability Kit (CCMCK), Pyrotechnics and simunitions.

d. FACILITIES AVAILABLE:

- (1) Classroom with Capacity for 250 personnel
- (2) Connex Containers and wooden structures arranged to simulate villages in the Middle East.

e. SPECIAL INSTRUCTIONS:

- (1) This is a dry fire range only.
- (2) Only wheel vehicles are authorized on this range.

f. CONFLICTS:

- (1) Home Station Training Lane (HSTL)
- (2) TAC 9C



Figure E - 80 Range 86 - Buena Vista (Mexican American)



Table E - 84. Rappel Tower

a. LOCATION: Located at coordinate WK33270, Map 1:50,000, DIXJMTTC 001, June 2006, 1.5 miles from ASA Fort Dix Headquarters off Pointville Road

b. DIRECTION: Drive south on Texas Avenue turn west on tank trail .1 mile outside Texas Gate between Amphibious Lake and the Quarry, take the trail to Gas Road turn north on Gas Road the Rappel Tower is on your left

c. CAPABILITIES:

(1) Primary: The rappel tower gives personnel confidence in their mental and physical ability, cultivates spirit and daring, promotes teamwork and provides a challenge to small unit leaders

(2) Alternate: None

(3) Ammunition Capability: None

d. FACILITIES AVAILABLE:

(1) Tower

(2) Portable Latrines

e. SPECIAL INSTRUCTIONS:

(1) Either the OIC or Safety Officer must be a certified Rappel Master graduate of a US Army Rappel Master Course. Certification will be submitted to TMD before a unit submits a request for the rappel tower; certifications will be maintained on file for one year. IAW TC 21-24 Rappel Masters are required to be checked every six months by another Rappel Master in order to maintain current certifications. Certification from one of the following is acceptable.

(a) Special Forces Qualification Course

(b) Light Infantry Course, Pathfinder Course

(c) Mountain Warfare Qualification Course

(d) First ROTC Region Rappel Safety Course

(e) Civilian organizations will have certification from accredited Rappel Master Course.

(2) The OIC/Safety Officer must complete the rappelling checklist (Figure E-69) and conduct the safety briefing before training begins

(3) Training on the tower will be postponed during rain or when the tower is wet

(4) Heavy duty gloves must be worn

(5) Unit OIC and/or Safety Officer are responsible for preparing risk assessment and rappelling check list for each day of training. These items will be made available to the USASAFD Safety Officer or Range Control Inspector when requested

f. CONFLICTS: None

Table E - 85. Tactical (TAC) Training Areas

a. LOCATION: TAC Area designation, type, location, facilities contained within and distance from ASA Headquarters are indicated below, on MAP, 1:50,000, V722SFORTDIXMIM 001, June 2017

Figure E-81 Tactical Area Functional and Facility Description

TA/FAC	INVENTORY	DESCRIPTION/CLASSIFICATION/RECOMMENDED USES	RESTRICTIONS
TAC 01A	TWO CLASSROOMS (200) (BLDGS 2501 & 2543), THREE CLASSROOMS (150) (BLDGS 2544, 2545 & 2546), FOUR OVERHEAD PAVILIONS (75) (BLDGS 2547, 2548, 2549 & 2550) AND LOADING DOCK 2523, INSIDE 2 FENCED AREAS.	CO TO BN- LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS, COMMAND POST EXERCISES, UNIT STAGING AREA.	NO AERIAL FLARES/ NO SUAS.
TAC 01B	ONE ASSEMBLY AREA	CO- LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS	NO AERIAL FLARES/ NO SUAS.
TAC 01C		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS, UTV DRIVERS TRAINING.	NO AERIAL FLARES/ NO SUAS.
TAC 01D		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS, UTV DRIVERS TRAINING.	ALL MUNITIONS RESTRICTED/ NO SUAS.
TAC 01E		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS.	ALL MUNITIONS RESTRICTED/ NO SUAS.
TAC 01F	ONE CLASSROOM (50) BLDG 1812	PLT LIGHT MANEUVER AREA. LAND NAVIGATION COURSE 2	NO AERIAL FLARES/ NO SUAS
TAC 02A		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS, UTV DRIVERS TRAINING.	NO AERIAL FLARES/ NO SUAS/ NO DRIVING ON PIPELINE RD.
TAC 02B		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED WARRIOR TASKS, UTV DRIVERS TRAINING.	NO AERIAL FLARES/ NO SUAS/ NO DRIVING ON PIPELINE RD.
TAC 02C	ONE OPS STORAGE BLDG 7201, COUNTER IED (HSTL WEST); PAVED ROADS, HIGHWAY OVERPASS, TRAIL NETWORK, MULTIPLE COMPOUND OBJECTIVES.	CO TO BN-, LIGHT MANEUVER AREA. BEST USES: CIED, MOUNTED/DISMOUNTED WARRIOR TASKS, DRIVERS TRAINING, EXEVAL.	NO AERIAL FLARES/ NO SUAS.

TAC 03A	ONE CLASSROOM (50) BLDG 7411; SIX CLASSROOMS (150) BLDG 7410/7415/7419/7420/7433/7488; TWO VAULTED LATRINES BLDG 7439/74201; RAPPEL TOWER BLDG 7426; BLEACHER ENCLOSURE BLDG 7432, OBSTACLE COURSE, LAND NAVIGATION 3.	CO TO BN-, LIGHT MANEUVER AREA. BEST USES: ROUND ROBIN WARRIOR TASKS, RAPPELING, TEAM BUILDING, LAND NAVIGATION.	NO AERIAL FLARES/ NO SUAS.
TAC 03B	AMPHIBIOUS LAKE, TRAIL NETWORK.	CO, LIGHT MANEUVER AREA. BEST USES: MOUNTED/DISMOUNTED TRAINING, LIGHT VEHICLE DRIVERS TRAINING, ROPE BRIDGE WATER CROSSING	NO AERIAL FLARES/ NO SUAS.
TAC 03C	BIVOUAC 24: COVERED MESS BLDG 7467, ONE CLASSROOM (50) BLDG 7461, VAULTED LATRINES BLDG 7463; IR SITE 3C: ONE CLASSROOM (150) BLDG 7464; LAND NAVIGATION 4.	CO, LIGHT MANEUVER AREA WITH BIVOUAC, DETAINEE OPERATIONS, LAND NAVIGATION.	NO AERIAL FLARES/ NO SUAS.
TAC 04	LAKE OF THE WOODS, TRAIL NETWORK.	PLT LIGHT MANEUVER AREA. BEST USES: MOUNTED/DISMOUNTED PATROLLING, LIGHT TACTICAL AND UTV DRIVERS TRAINING.	NO AERIAL FLARES/ NO SUAS.
TAC 05A	BIVOUAC 1: COVERED MESS BLDG 8559; BIVOUAC 2B: COVERED MESS BLDG 8572.	PLT LIGHT MANEUVER AREA: BEST USES: DISMOUNTED PATROLLING.	NO AERIAL FLARES/ NO SUAS
TAC 05B	BIVOUAC 2A: CLASSROOM (50) BLDG 8566; COVERED MESS BLDG 8565; VAULTED LATRINE BLDG 8571; LZ CAPABLE OF ACCOMODATING 2 HELICOPTERS.	PLT LIGHT MANEUVER AREA. BEST USES: UNIT STAGING AREA; BIVOUAC AREA.	NO AERIAL FLARES/ NO SUAS
TAC 05C	BIVOUAC 3A: COVERED MESS BLDG 8580; VAULTED LATRINE BLDG 85781; BIVOUAC 3B: COVERED MESS BLDG 8574; CLASSROOM (100) BLDG 8585.	PLT LIGHT MANEUVER AREA. BEST USES: BIVOUAC; LITTER OBSTACLE COURSE.	NO AERIAL FLARES/ NO SUAS
TAC 05D	BIVOUAC 4A: COVERED MESS BLDG 8576; BIVOUAC 4B: COVERED MESS BLDG 8584; VAULTED LATRINE BLDG 85771; BIVOUAC 4C: COVERED MESS BLDG 8583; BIVOUAC 5: COVERED MESS BLDG 8590; VAULTED LATRINE BLDG 8591; BIVOUAC 6: COVERED MESS BLDG 8596; VAULTED LATRINE BLDG 8594.	PLT LIGHT MANEUVER AREA: BEST USES: DISMOUNTED PATROLLING; CO BIVOUAC.	NO AERIAL FLARES/ NO SUAS
TAC 05E	DTA 2: CLASSROOM (50) BLDG 8524; CLASSROOM (200) BLDG 8525; CLASSROOM (50) BLDG 8527; COVERED MESS BLDG 8526; VAULTED LATRINE BLDG 8530; DTA 3: CLASSROOM (50) BLDG 8513; VAULTED LATRINE BLDG 8514.	PLT LIGHT MANEUVER AREA. BEST USES: DRIVERS TRAINING; 2 COURSES ONE PAVED AND ONE OFF ROAD CONTAINING OBSTACLES; SINGLE LANE WINDING GRAVEL ROAD THROUGHOUT THE TRAINING AREA ALLOWING FOR BEGINNER AND EXPERIENCED DRIVERS TO MANEUVER LIGHT TO HEAVY VEHICLES.	NO AERIAL FLARES/ NO SUAS

TAC 06A		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED MANEUVER.	NO AERIAL FLARES/ NO SUAS
TAC 06B	BIVOUAC 7: CLASSROOM (50) BLDG 9044; COVERED MESS BLDG 90452; VAULTED LATRINE BLDG 9047; BIVOUAC 8A: COVERD MESS BLDG 9026; VAULTED LATRINE BLDG 9033.	PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED MANEUVER; BIVOUAC.	NO AERIAL FLARES/NO SUAS
TAC 06C	BIVOUAC 8: CLASSROOM (50) BLDG 9031; COVERED MESS BLDG 9024; BIVOUAC 9: SHOWER BLDG 9035; COVERED MESS BLDG 9028; VAULTED LATRINE BLDG 90290; BIVOUAC 10: CLASSROOM (50) BLDG 9041; COVERED MESS BLDG 9027; VAULTED LATRINE BLDG 9037; BIVOUAC 11: COVERED MESS BLDG 9040; VAULTED LATRINE BLDG 9039.	PLT LIGHT MANEUVER AREA. BEST USES: CO BIVOUAC; STAGING AREA.	NO AERIAL FLARES/ NO SUAS
TAC 06D	BIVOUAC 11A: CLASSROOM (50) BLDG 9820; COVERED MESS BLDG 9819; BIVOUAC 11B: COVERED MESS BLDG 9825.	PLT LIGHT MANEUVER AREA. BEST USES: CO BIVOUAC; STAGING AREA; WATER BOURNE OPERATIONS W/BOAT RAMPS ON SOUTHERN SHORE AND NORTHERN SHORE.	RANGE 25 RESTRICTS ALL WATER BOURNE OPS; NO SUAV
TAC 06E	BIVOUAC 11C: COVERED MESS BLDG 9889; VAULTED LATRINE BLDG 9888.	PLT LIGHT MANEUVER AREA. BEST USES: PLT BIVOUAC, DISMOUNTED PATROLING.	NO SUAV
TAC 06F	BIVOUAC 12A: CLASSROOM (50) BLDG 9891; COVERED MESS BLDG 9893; VAULTED LATRINE BLDG 9895; BIVOUAC 12B: COVERED MESS BLDG 9897.	PLT LIGHT MANEUVER AREA. BEST USES: CO BIVOUAC; STAGING AREA.	NO SUAV
TAC 07A		PLT LIGHT MANEUVER AREA. BEST USES: MOUNTED/DISMOUNTED PATROLING, LIGHT TACTICAL AND UTV DRIVERS TRAINING.	NO AERIAL FLARES/NO SUAS
TAC 07B		PLT LIGHT MANEUVER AREA. BEST USES: MOUNTED/DISMOUNTED PATROLING, LIGHT TACTICAL AND UTV DRIVERS TRAINING.	NO AERIAL FLARES/NO SUAS
TAC 07C		PLT LIGHT MANEUVER AREA. BEST USES: MOUNTED/DISMOUNTED PATROLING, LIGHT TACTICAL AND UTV DRIVERS TRAINING.	NO AERIAL FLARES/NO SUAS
TAC 07D		PLT LIGHT MANEUVER AREA. BEST USES: MOUNTED/DISMOUNTED PATROLING, LIGHT TACTICAL AND UTV DRIVERS TRAINING.	NO AERIAL FLARES/NO SUAS



TAC 08A		PLT LIGHT MANEUVER AREA. BEST USES: DISMOUNTED PATROLING.	NO SUAS
TAC 08B	BRINDLE BIVOUAC A: CLASSROOM (200) BLDG 9907; BRINDLE BIVOUAC C: CLASSROOM (100) BLDG 9921.	PLT LIGHT MANEUVER AREA. BEST USES: WATER PURIFICATION; CO BIVOUAC.	NO SUAS
TAC 09A		PLT LIGHT MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING.	NO SUAS
TAC 09B		PLT LIGHT MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING.	NO SUAS
TAC 09C	BIVOUAC 22: COVERED MESS BLDG 9349; BIVOUAC 22A: CLASSROOM (50) BLDG 9339; COVERED MESS BLDG 9331; SHOWER BLDG 9335; HSTL (EAST); ROAD NETWORK WITH MULTIPLE VILLAGES.	PLT LIGHT MANEUVER AREA. BEST USES: COUNTER IED TRAINING LANE W/ VILLAGES, BRIDGES, FUEL STATION, ON A ROAD NETWORK; BIVOUAC AREAS.	
TAC 09D	DTA 5: CLASSROOM (50) BLDG 9315; VAULTED LATRINE 9316; HSTL (EAST): CLASSROOM (100) BLDG 9322.	HSTL (EAST): COUNTER IED TRAINING AREA; DTA 5: OFF ROAD HILLY TERRAIN FOR LIGHT TO MEDIUM VEHICLE BEGINNER AND ADVANCED DRIVERS TRAINING.	NO SUAS
TAC 09E	DTA 4: CLASSROOM (100) BLDG 94001; BIVOUAC 21: CLASSROOM (50) BLDG 9446; CLASSROOM (200) BLDG 9447; COVERED MESS BLDG 9439; VAULTED LATRINE BLDG 9444.	PLT VEHICLE TRAINING: LIGHT TO MEDIUM VEHICLE TRAINING ON AN OFF ROAD COURSE; CO BIVOUAC.	NO SUAS
TAC 09F	BIVOUAC 20: CLASSROOM (50) BLDG 94320; COVERED MESS BLDG 9438; SHOWER BLDG 9436.	PLT LIGHT MANEUVER AREA, BEST USE: DISMOUNTED PLT MANEUVER ISO RANGE 61.	NO SUAS
TAC 10A		PLT HEAVY MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING.	NO SUAS
TAC 10B		PLT HEAVY MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING.	NO SUAS
TAC 10C		PLT LIGHT MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING.	NO SUAS

TAC 10D		PLT LIGHT MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING.	NO SUAS
TAC 10E			NO SUAS
TAC 11A	BIVOUAC 18: CLASSROOM (50) BLDG 94701; SHOWER BLDG 9448; COVERED MESS BLDG 94702; BIVOUAC 18A: COVERED MESS BLDG 9452; BIVOUAC 19: COVERED MESS BLDG 9443; VAULTED LATRINE BLDG 9435.	PLT HEAVY MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING; CO BIVOUAC; DRIVERS TRAINING.	NO SUAS
TAC 11B	BIVOUAC 16: CLASSROOM (50) BLDG 9514; COVERED MESS BLDG 9517; SHOWER BLDG 9518; VAULTED LATRINE BLDG 9516.	PLT HEAVY MANEUVER AREA. BEST USES: AFP 14; PLT MOUNTED/DISMOUNTED PATROLING; DRIVERS TRAINING.	
TAC 12A	HEAVY ENG TRNG SITE: CLASSROOM (50) BLDG 9617; COVERED MAINT AREA 9619.	CO HEAVY MANEUVER AREA. BEST USES: HEAVY EQUIPMENT TRAINING SITE; AFP 4/8/9; DRIVERS TRAINING.	
TAC 12B	BIVOUAC 17: CLASSROOM (50) BLDG 9636; COVERED MESS BLDG 9632.	PLT HEAVY MANEUVER AREA. BEST USES: AFP 17; PLT MOUNTED/DISMOUNTED PATROLING; DRIVERS TRAINING.	ARTILLERY FIRE LIMITED TO 0700-1800 HRS
TAC 12C	IR SITE 12C: CLASSROOM (200) BLDG 9650.	PLT LIGHT MANEUVER AREA. BEST USES: MP DETENTION SITE; DISMOUNTED PATROLING; STAGING; COMMAND POST EXERCISES.	NO SUAS
TAC 13A	BIVOUAC 12C: COVERED MESS BLDG 9746; VAULTED LATRINE BLDG 9744; BIVOUAC 13: COVERED MESS BLDG 9647; VAULTED LATRINE 9646; BIVOUAC 13A: COVERED MESS BLDG 9641.	PLT HEAVY MANEUVER AREA. BEST USES: BIVOUAC ISO QUALIFICATION RANGES	NO SUAS
TAC 13B	BIVOUAC 15: COVERED MESS BLDG 9634	PLT HEAVY MANEUVER AREA. BEST USES: PLT MOUNTED/DISMOUNTED PATROLING; CO BIVOUAC; DRIVERS TRAINING.	
TAC 13C	COL LIBERTY: CLASSROOM (200) 9605; CLASSROOM (200) BLDG 9614.	PLT HEAVY MANEUVER AREA. BEST USE: AFP 6/7; AFP 13; COMMAND POST COMPOUND; PLT MOUNTED/DISMOUNTED PATROLING; DRIVERS TRAINING.	
TAC 13D	COL VICTORY: CLASSROOM (OPS CELL) BLDG 96168; CLASSROOM (UNIT CP) BLDG 96167; CLASSROOM (MWR) BLDG 96169; CLASSROOM (MEDICAL) BLDG 96170; SHOWER FACILITY 96166; WAREHOUSE 96160; WHISKEY TENTS 1/2/3 AND MAINT TENTS 1/2 ASSIGNED TO UNITS.	PLT HEAVY MANEUVER AREA. BEST USE: FORWARD OPERATING BASE FOR THEATER IMMERSION TRNG; PLT MOUNTED/DISMOUNTED PATROLING; DRIVERS TRAINING.	

b. DIRECTIONS:

(1) TAC 1A: Exit through the Route 68 Gate for .5 miles turn left onto Juliustown-High Bridge Road .3 miles site is on your right

(2) TAC 1B thru 1F: Exit through the Route 68 Gate make an immediate left onto Pemberton Fort Dix Road proceed for 1.7 miles; TAC 1B and 1C are on your right and TAC 1D, 1E and 1F are on your left

(3) TAC 2A, 2B: Exit through the Pemberton Gate make the right onto Pointville Road the TAC Areas will be on your left

(4) TAC 2C: Exit through the Pemberton Gate continue on Juliustown Road the entrance is 1.3 miles on your right

(5) TAC 3A: Exit through the Pemberton Gate make a left onto Pointville Road the TAC Area is on your right

(6) TAC 3B and 3C: Exit through the Pemberton Gate make a left onto Pointville Road proceed 1 mile to Gas Road make a right and the TAC Areas will be on your left

(7) TAC 4: Drive south on Texas Avenue and turn east on Range Road for .5 miles Area is on your right

(8) TAC 5A, 5B, 5C: Drive south on Texas Avenue turn east on Range Road for 2.2 miles, turn north on Browns Mills/Cookstown Road. Distances to TAC Areas;

(9) 5E: Drive south on Texas Avenue turn east on Range Road for 1 mile the TAC Area is on your left

(10) TAC 6A: Drive south on Texas Avenue turn east on Range Road for 2.2 miles, turn north on Browns Mills/Cookstown Road for .6 miles TAC Area is on your right

(11) TAC 6B, 6C, 6D, 6E and 6F: Drive south on Texas Avenue turn east on Range. Distances to TAC Areas;

(12) TAC 7A, 7B, 7C and 7D: Drive south on Texas Avenue turn east on Range Road for 2.2 miles, turn north on Browns Mills/Cookstown Road .8 miles to CooksCorner Road turn east. Distances to Tac Areas;

(13) TAC 8A, 8B and 9A: Drive south on Texas Avenue turn east on Range Road for 2.2 miles, turn north on Browns Mills/Cookstown Road .8 miles to CooksCorner Road turn east for 1.3 miles to Buckswamp Road turn east. Distances to Tac Areas;

SITE	MILEAGE	SIDE OF ROAD
TAC 8A	1.4 Miles	Right
TAC 8B	2.4 Miles	Right
TAC 9A	3.1 Miles	Left

(14) TAC 9B, 9C, 9D and 9E: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn north on County Highway 33. Distances to TAC Areas;

SITE	MILEAGE	SIDE OF ROAD
TAC 9B	5.1 Miles	Left
TAC 9C	4.0 Miles	Right
TAC 9D	3.0 Miles	Right
TAC 9E	2.8 Miles	Left

(15) TAC 10A and 10B: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn north on County Highway 33 for 2.6 miles exit through gate onto Highway 539 turn left. Distances to TAC Areas;

SITE	MILEAGE	SIDE OF ROAD
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TAC 10A	1.4 Miles	Right
TAC 10B	0.1 Miles	Right

(16) TAC 10 C/D/E: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn north on County Highway 33 for 2.6 miles exit through gate onto Highway 539 turn right . Distances to NJUTES and ECS Areas Gated Entrance on the Lakehurst Fenceline;

SITE	MILEAGE	SIDE OF ROAD
TAC 10C	1.47 Miles	Left
TAC 10D	1.47 Miles	Left
TAC 10E	1.47 Miles	Left

(17) TAC 11A and 11B: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn north on County Highway 33. Distances to TAC Areas;

SITE	MILEAGE	SIDE OF ROAD
TAC 11A	1.6 Miles	Right
TAC 11B	0.3 Miles	Right

(18) TAC 12A and 12B: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn south on Grand Concourse. Distances to TAC Areas;

SITE	MILEAGE	SIDE OF ROAD
TAC 12A	0.2 Miles	Left
TAC 12B	1.2 Miles	Left

(19) TAC 12C: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn south on Grand Concourse for 1.9 miles to Route 70, turn east on Route 70 for .6 miles the entrance is on your right

(20) TAC 13A: Drive south on Texas Avenue turn east on Range Road for 7.3 miles the TAC Area is on your right

(21) TAC 13B, 13C, 13D: Drive south on Texas Avenue turn east on Range Road for 9.3 miles to Times Square, turn south on Grand Concourse. Distances to TAC Areas;

SITE	MILEAGE	SIDE OF ROAD
TAC 13B	0.5 Miles	Right
TAC 13C	1.0 Miles	Right
TAC 13D	1.5 Miles	Right

#### c. CAPABILITIES:

(1) Primary: Light and Heavy maneuver, mounted and dismounted; Artillery Firing Points; Home Station Training Lanes (Counter IED).

(2) Alternate: Bivouac, tactical foot marches and Command Post Exercises

(3) Ammunition Capability: Blanks, Pyrotechnics, Simunitions and Close Combat Mission Capability kit (CCMCK); smoke may be used in all tactical areas, not located on Cantonement, based upon fire restrictions

#### d. FACILITIES AVAILABLE:

(1) All facilities are listed in the table describing the location and function

(2) Portable Latrines will be located within the TAC Areas based upon utilization as discussed in the Final Coordination Meeting.

#### e. SPECIAL INSTRUCTIONS:

(1) Requests to use flares and other pyrotechnics in the tactical training areas must be received by Range Control a minimum of ten (10) days prior to desired use. Requests will include a 1:50,000 overlay,

with the date-time group and type of items to be used. During planning the following guidelines will be adhered to:

- (a) Smoke will not be used within 200 meters of hardball roads or 500 meters of Cantonement fence line
- (b) Pyrotechnics will not be used within 100 meters of roads.
- (c) Pyrotechnics are not authorized VIC of occupied Bivouac Sites.
- (d) Prior to use the OIC/RSO will verify that Pyro is authorized IAW current Fire Codes.
- (2) For the safety of aircraft utilizing McGuire runways aerial flares are not authorized in the following TAC Areas; 1A, 1B, 1C, 1D, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 4, 5A, 5B, 5C, 5D, 5E, 5F, 7A, 7B, 7C, 7D, 10C, 10D, 10E and any TAC Area located on Cantonement
- (3) Quartermaster units wishing to conduct water osmosis or bath operations must request gray water tanks from Range Control Operations
- (4) The Engineer compound within TAC 6D is available for water osmosis operations and Engineer Bridging operations in Hanover Lake. Brindle Lake in TAC 8B is available for water osmosis operations
- (5) Access to TAC Areas 10 C/D/E will be through the gated entrance to the north of ECS 27, units will sign for the key at the Range Firing Desk. Units will post guards while they are utilizing the gate and they will not allow entrance to anyone but unit personnel. **Units will contact the Law Enforcement Desk at 609-754-6001 when the gate is opened and closed to TAC Areas 10 C/D/E.** The gate will remain closed and locked when vehicle ingress/egress is not occurring.
- (6) In the event the key to TAC Areas 10 C/D/E is lost the unit will immediately report the loss to range control. If the gate is in the open position when the key is lost the unit will post a two man guard detail at the entrance until range control can replace the lock.
- (7) Warning signs will be posted in TAC 10 D/E stating, **“STOP Naval Engineer Testing Beyond This Point. Off Limits to All Personnel.”** Should you encounter these signs turn around and go back the direction you came from.

f. CONFLICTS:

- (1) All facilities within the boundaries of the TAC Area.
- (2) Unit's wishing to utilize an area with-in a TAC Area that is previously reserved will initiate a co-use agreement. It is the unit requesting a co-use responsibility to coordinate with the owning unit prior to the final coordination meeting at which time all agreements will be finalized.

Figure E-82 Lakehurst TAC Areas with Off Limits Area





Table E - 86. Vehicle Wash Rack (Large)

a. LOCATION: Located at coordinate WK354274, Map 1:50,000, DIXJMTTC 001, June 2006, 3.3 miles from ASA Fort Dix Headquarters on Range Road

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for .7 miles the site is on your right

c. CAPABILITIES:

(1) Primary: Tactical Vehicle Wash Facility capable of high pressure (cold water) for both tracked and wheeled vehicles

(2) Alternate: None

(3) Ammunition Capability: None

d. FACILITIES AVAILABLE:

(1) Twenty vehicle stalls with two large hoses in each stall

(2) Control Tower

(3) Latrines (1-Male, 1-Female)

e. SPECIAL INSTRUCTIONS:

(1) Facility is scheduled through TMD OTR

(2) Units will coordinate opening and clearing the site with Range Control Firing Desk

(3) The use of soap to clean vehicles is not authorized

(4) No POV washing is authorized

(5) Unauthorized use or failure to clean the site will cause the unit to be denied use of the facility

f. CONFLICTS: The facility will close from November through March dependent upon the ambient air temperature, at the discretion of the Range Operations Officer

Figure E - 83 Vehicle Wash Rack (Large)

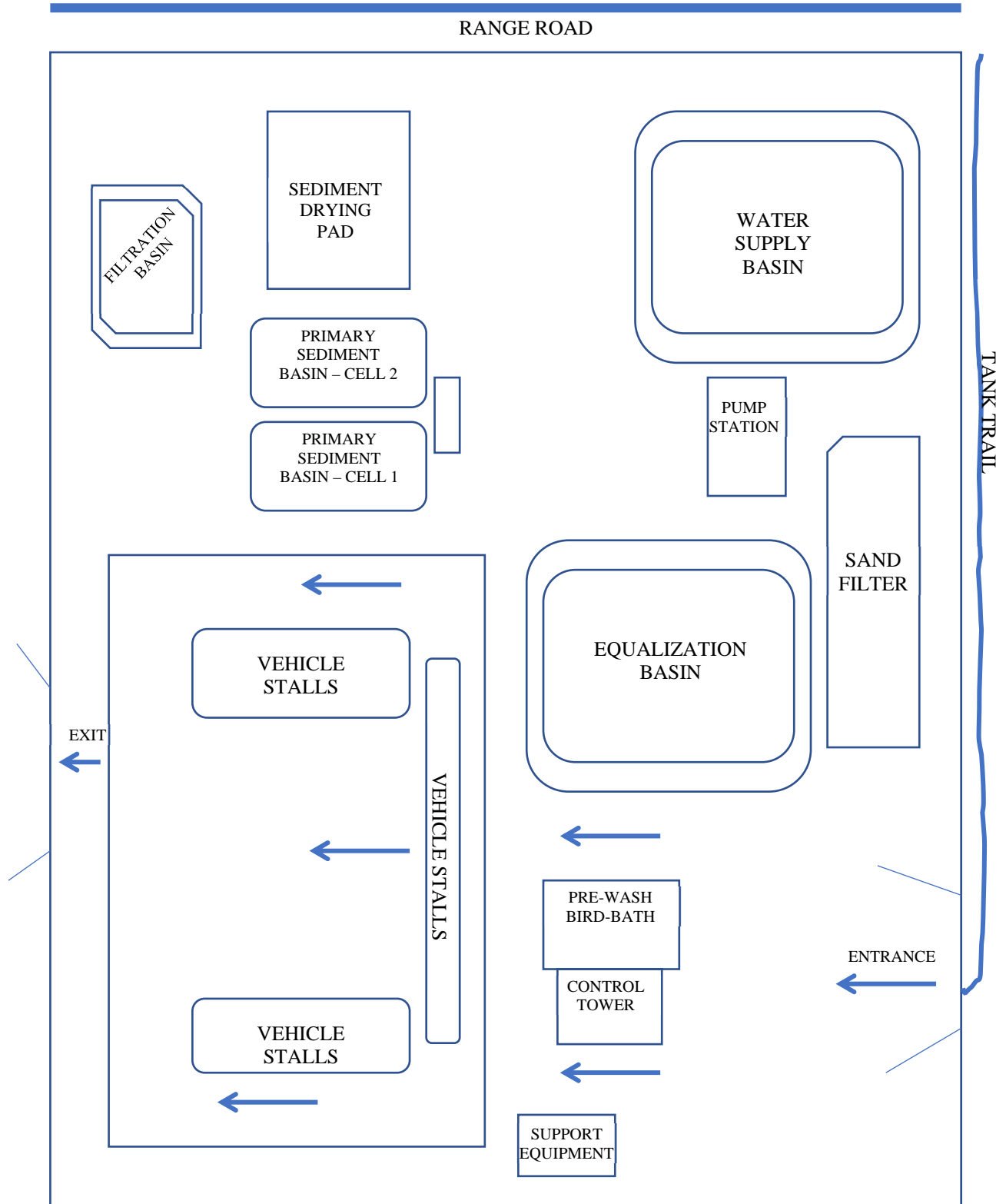


Table E - 87. Vehicle Wash Rack (Small)

a. LOCATION: Located at coordinate WK353276, Map 1:50,000, DIXJMTTC 001, June 2006, 3.1 miles from ASA Fort Dix Headquarters on Range Road

b. DIRECTION: Drive south on Texas Avenue turn east on Range Road for .7 miles the site is on your left VIC DOL Vehicle Maintenance Facility

c. CAPABILITIES:

- (1) Primary: Tactical Vehicle Wash Facility during inclement weather
- (2) Alternate: None
- (3) Ammunition Capability: None

d. FACILITIES AVAILABLE: Facility with two pressure washing hoses and a recovery facility to capture water runoff

e. SPECIAL INSTRUCTIONS:

- (1) Facility is scheduled through TMD OTR
- (2) Units will coordinate opening and clearing the site with Range Control Firing Desk. Range Control personnel will provide instruction on the use of the facility to a senior leader who will be responsible for operating the facility; upon completion contact the firing desk and request clearance inspection
- (3) The use of soap to clean vehicles is not authorized
- (4) No POV washing is authorized
- (5) Unauthorized use or failure to clean the site will cause the unit to be denied use of the facility

f. CONFLICTS: None

## **Appendix F**

### **Indirect Fire Weapons Systems**

#### **F-1. General**

- a. Units firing indirect fire must follow the procedures for firing ranges and the additional procedures outlined in this appendix.
- b. Units must have hasty 5th or 4th order survey based on the firing system they are using.
- c. All indirect rounds must be observed safe in the Main Impact Area. If any round is unobserved by the OP, the unit may fire a check round at the same data. If the second round is not observed, the unit will immediately go to a cease fire freeze status and call Range Control. Range Control Safety will then decide if erratic round procedures will be initiated.

#### **F-2. Safety Certification**

- a. Unit commanders will set-up and conduct a safety certification program within their units IAW regulations and weapon specific TCs/TMs/FMs.
- b. Units will submit a roster of safety certified personnel with the date of certification, name, rank, and SSN signed by a commander, O-5 or above.
- c. Indirect Fire Safety Certification Rosters are valid for one year from date of certification.

#### **F-3. Safety Briefing**

OICs and RSOs will ensure that a safety briefing is given that includes, in addition to other safety information:

- a. Limits of Danger Area E.
- b. Minimum uniform requirements around firing system.
- c. Procedures when receiving the command "Cease Fire Freeze."
- d. Designated smoking area.

#### **F-4. Declination**

- a. Units firing indirect fire on USASA Fort Dix will use declinated aiming circles and compasses. Declination must be accomplished no earlier than 48 hours prior to the first date of occupation.
- b. There are three declination stations on USASA Fort Dix: Ruby, Sophia, and Pearl. Data for these stations are contained in Table F-5 of this appendix. Declination may be done on non-permanent declination stations of 5th order survey accuracy with prior permission of the USASA Fort Dix Range Safety Office.
- c. The OIC and RSO will be decertified for failure to utilize declinated equipment.

#### **F-5. Lay of the Unit**

- a. Units must lay with a declinated aiming circle except units with Paladins and M777A2 towed howitzers (see para b).
  - (1) A separate declinated aiming circle will be used for safety. The safety circle will be set-up a minimum of 10 meters from the primary means of lay.

(2) When the aiming circle is set-up using surveyed data, the safety circle will be set-up magnetically. The lay of the pieces must check within three (3) mils of the safety circle.

(3) Failure to use two circles will cause the unit to be placed into a cease-fire; the OIC and RSO will be decertified by Range Control Safety. A new OIC and RSO along with correction of the problem are required before units may resume firing.

b. Digital Fire Control System (DFCS) must receive its initial location and altitude from a fourth-order survey control point.

(1) RSO must verify DFCS initial location and check mission with POC.

(2) Verification of data includes independent checks by independent means, PDFCS/DFCS, and Advanced Field Artillery Tactical Data System (AFATDS) must agree with the following tolerances.

(a) FZ VT: 1 sec

(b) DF: 2 mils

(c) QE: 2 mils

(3) Units will conduct verification mission with DFCS whenever the following occurs:

(a) Artillery Fire Control System (AFCS)/DFCS restart.

(b) Significant change in database (MET, MVV, registration).

## **F-6. Bore-Sight**

All weapons will be bore-sighted according to the TM for the weapon system utilized.

## **F-7. Safety Fans, Safety T and Surface Danger Zones (SDZ)**

a. Units will submit a safety fan and SDZ data to USASA Fort Dix Range Safety Office for approval for each weapon, type ammunition, and firing point used. The Range Safety Office will utilize the data to produce the SDZ to be used.

b. Safety fans and SDZ data will be submitted NLT the Final Coordination Meeting held every Wednesday ten (10) days prior to date of firing.

c. Safety fans are reusable for one year from the date of approval.

d. Artillery Units will utilize the format in Table F-7 and Mortar Units will utilize the format in Table F-8.

e. The safety fan will include at a minimum:

(1) Unit Designation

(2) Type Weapon System

(3) Ammunition DODIC

(4) Fuse, Powder, and Charge

(5) Firing point number and grid for battery/platoon center

(6) Diagram of safety fan

(7) Maximum and minimum ranges to include doglegs

(8) Left and right azimuths to include doglegs

(9) Maximum Ordnance in Feet

f. Units may design their safety fan as they desire, but all points will land in designated Impact Area.



- g. If approved, safety fans will be given a control number by the USASA Fort Dix Range Safety Office, Date and Name of Approval Authority, and either an electronic signature or initialed by the Safety Officer to indicate approval.
- h. Safety fans must be posted on the unit's safety chart for manual computing and /or the operations map for computer operations.
- i. Safety Ts will be utilized and present at every Tube/Section and signed IAW unit SOP.

#### **F-8. Mortar / Artillery Safety Checklist**

Upon the unit's arrival and prior to conducting first fire mission, an indirect fire checklist provided in Table F-6 of this appendix, will be completed by the OIC/RSO and turned in to the firing desk before receiving permission to fire. Once accomplished you will not be required to turn in a second during your training cycle.

#### **F-9. Ammunition**

- a. Only ammunition approved for overhead fire will be used by artillery units on USASA Fort Dix.
- b. Mortars will not conduct overhead fire on USASA Fort Dix.
- c. Firing a round without a fuse is prohibited.
- d. Ammunition will be stored IAW unit SOP, but must be stored in a manner that the ammunition is kept dry and free of foreign material.
- e. Fuses will be seated with the correct fuse wrench only.
- f. Phosphorous Munitions are **PROHIBITED** to be fired on USASA Fort Dix ranges.

#### **F-10. Position and Azimuth Designators (PADS)**

Units equipped with PADS may fire from any safe location when the safety data is computed on two separate charts and approved by USASA Fort Dix Range Safety. Alternate means of survey to the 4th or 5th Orders is authorized if able to obtain accurate location and elevation with prior approval of USASA Fort Dix Range Safety.

#### **F-11. High Angle Fire**

High angle fire is authorized, but no unit may exceed a ceiling of 8,000 feet MSL.

#### **F-12. Noise Limits**

- a. Indirect firing is limited to 0700-2330 daily.
- b. Range Control may place a restriction of two (2) rounds in the air at the same time; based on weather conditions.

#### **F-13. Opening and Closing Information Requirements**

- a. In addition to opening and first round information requirements, units requesting to fire indirect weapons will include the following information when requesting to fire a first round.
  - (1) Max Ordnance in Feet
  - (2) Center of Impact Area
  - (3) Safety Fan Control Number

b. After receiving permission to fire a spotting round, units will report the location of projectile impact to Range Control in order for the firing desk technician to verify it landed in the approved fire box. At this time, Range Control will issue a first-round time to the unit.

c. After completion of firing, but no later than 2330, units will report by DODIC the number of rounds fired which will close out firing for the day.

d. First round procedures are conducted prior to firing from each firing positions daily if they do not move from the firing point. First round procedures will also be conducted every time a unit moves to a new firing point within the hours of 0600-2330 daily.

#### **F-14. Cease - Fire - Freeze / Erratic Round Procedures**

a. When an erratic round is reported to the Range Control Firing Desk, the technician will broadcast, CEASE-FIRE-FREEZE which will initiate erratic round procedures.

b. Erratic round procedures are contained in Appendix L (Accident/Incident Procedures), Paragraph L - 5.

c. Once Erratic Round Procedures have been initiated firing will not resume until authorized by USASAFD Range Safety Officer.

#### **F-15. Observation**

Indirect fire can be observed from OP 59C Tower and from Range 59C Tower; every round fired on ASAFD must be observed safe within the impact area.

#### **F-16. Powder**

a. Excess powder increments will be stored and marked distinctively to prevent accidental initiation of the powder.

b. Excess powder may be burned on the firing point in an area cleared of all combustible materials.

c. A fire extinguisher and shovels must be present and immediately available prior to initiating burns.

d. Gasoline, kerosene and fuels will not be used to initiate burns.

e. A detail will consist of a minimum of two personnel, and they will remain on site until all flammable material is extinguished.

f. Permission to burn powder will be requested from Range Control prior to initiating any burns.

**Table F-1. Artillery Firing Point Locations**

AFP	EASTING	NORTHING	ALT	REMARKS
1	3777.2	30743.7	+28.4	Dry Fire Only
4	49514.2	25164.6	+47.8	
5	38615.2	30970.9	+23.3	Dry Fire Only
6	48834.8	24648.4	+46.9	
7	48947.9	24761.1	+45.7	
8	49472.5	25296.9	+48.4	
9	49431.6	25042.7	+47.7	
13	549141.03	4424621.70	+47.7	
14	549095.56	4427107.47	+48.9	
15	548968.21	4427616.82	+53.3	Dry Fire Only
17	549902.15	4424016.40	+41.8	

**Table F-2. Mortar Firing Point Locations**

MFP	EASTING	NORTHING	ALT	REMARKS
1	548019.25	4425975.96	+37.0	Range 39B
2	546886.26	4425747.61	+38.5	Range 39A
4	547337.41	4426215.01	+38.5	Range 39B
5	548265.93	4427871.68	+49.2	Range 47A
6	546936.88	4428509.13	+60.4	Range 59E
7	546140.38	4431474.91	+43.5	Range 71
10	546023.76	4431807.05	+43.6	Range 75

**Table F-3. Impact Area Boundaries**

EASTING	NORTHING
4558	2760
4572	2842
4480	2940
4310	2987
4214	2802
4304	2712

**Table F-4. Target List**

**TARGET LIST - ARTILLERY/MORTAR IMPACT AREA**

TARGET DESCRIPTION	EASTING	NORTHING	HT	GRID
Box (green and yellow)	44713.4	28379.9	+45.5	18TWK4471328379
APC (white)	44644.2	28456.3	+47.9	18TWK4464428456
APC (white)	44542.5	28517.9	+43.2	18TWK4454228517
Bus (white topped)	44749.8	28580.6	+48.1	18TWK4474928580
Bus (w/car body)	44933.8	28608.9	+49.3	18TWK4493328608
Truck (5-ton w/no bed)	44742.0	28637.9	+47.4	18TWK4474228637
Van (blue panel)	44578.3	28667.3	+45.0	18TWK4457828667
Truck (blue panel)	44424.5	28741.4	+41.1	18TWK4442428741
Truck hulk	44691.0	28741.4	+41.7	18TWK4469128741
Truck (in tree line)	44725.5	28867.8	+49.2	18TWK4472528867
Bus hulk w/ 2 car hulks	44257.0	28977.9	+43.8	18TWK4425728977
Bus hulk w/ truck hulk	44876.6	28982.6	+46.4	18TWK4487628982
Ambulance	45007.2	29064.2	+50.8	18TWK4500729064

**SHERIDAN TARGET NUMBERS**

<b>1</b>	43914	28427	+31	18TWK4391428427
<b>2</b>	43936	28425	+20	18TWK4393628425
<b>3</b>	43950	28415	+22	18TWK4395028415
<b>4</b>	43970	28430	+32	18TWK4397028430
<b>5</b>	43988	28427	+28	18TWK4398828427
<b>6</b>	43989	28413	+27	18TWK4398928413
<b>7</b>	44007	28408	+25	18TWK4400728408
<b>8</b>	44009	28427	+25	18TWK4400928427
<b>9</b>	44026	28425	+32	18TWK4402628425
<b>10</b>	44032	28427	+23	18TWK4403228427
<b>11</b>	43761	28638	+32	18TWK4376128638
<b>12</b>	43316	28638	+22	18TWK4331628638
<b>13</b>	44036	28399	+23	18TWK4403628399
<b>14</b>	44046	28424	+29	18TWK4404628424
<b>15</b>	44265	28385	+35	18TWK4426528385
<b>16</b>	44285	28358	+27	18TWK4428528358
<b>17</b>	44315	28362	+34	18TWK4431528362
<b>18</b>	44347	28329	+31	18TWK4434728329
<b>19</b>	44382	28435	+28	18TWK4438228435
<b>20</b>	44335	28466	+29	18TWK4433528466
<b>21</b>	44336	28479	+38	18TWK4433628479
<b>22</b>	44307	28464	+36	18TWK4430728464
<b>23</b>	44294	28473	+34	18TWK4429428473
<b>24</b>	44334	28578	+37	18TWK4433428578
<b>25</b>	44337	28566	+30	18TWK4433728566
<b>26</b>	44339	28584	+34	18TWK4433928584
<b>27</b>	44320	28592	+29	18TWK4432028592

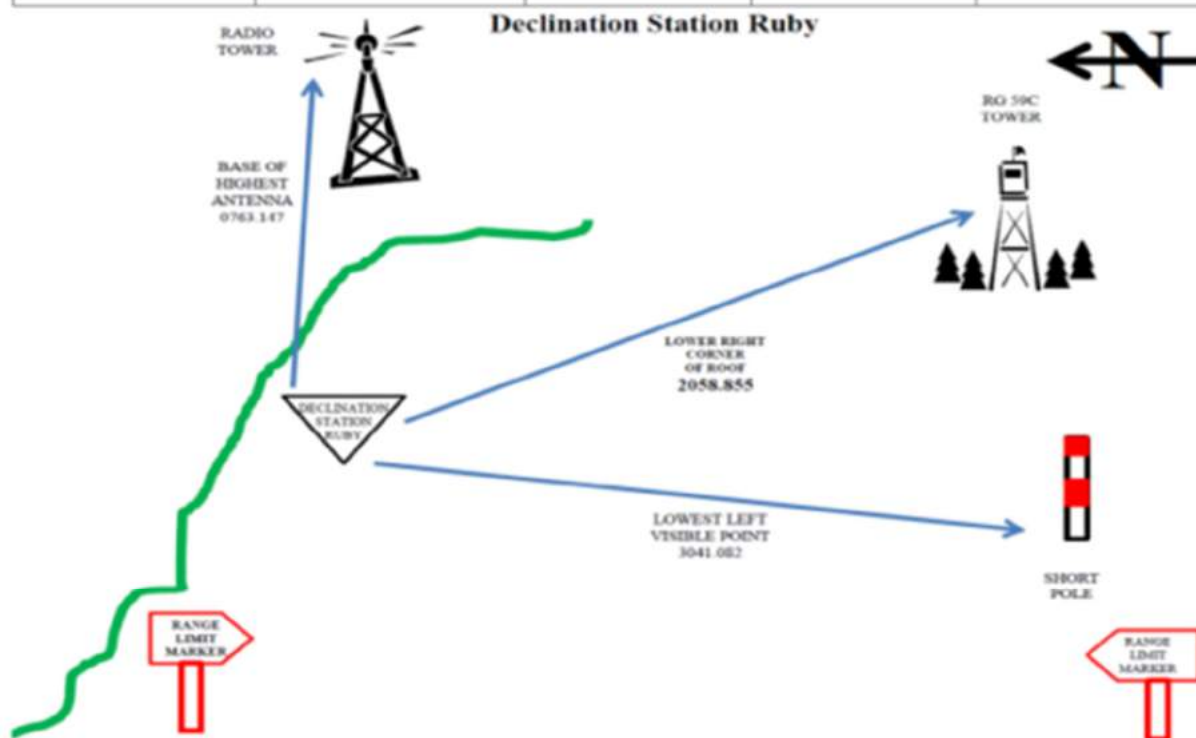
**Table F-5. Declination Station Data****1. General**

There are three declination stations located on USASAFD:

- a. Declination Station RUBY; located on Range 59C 18TWK4574628857.
- b. Declination Station Sophia; located IVO Marine Reserve Center on Old Range Road JB MDL 18SWK34502780.
- c. Declination Station Pearl; located on Range 65 18TWK4562330681.




## 2. Declination Station Diagrams (DA Form 1959)

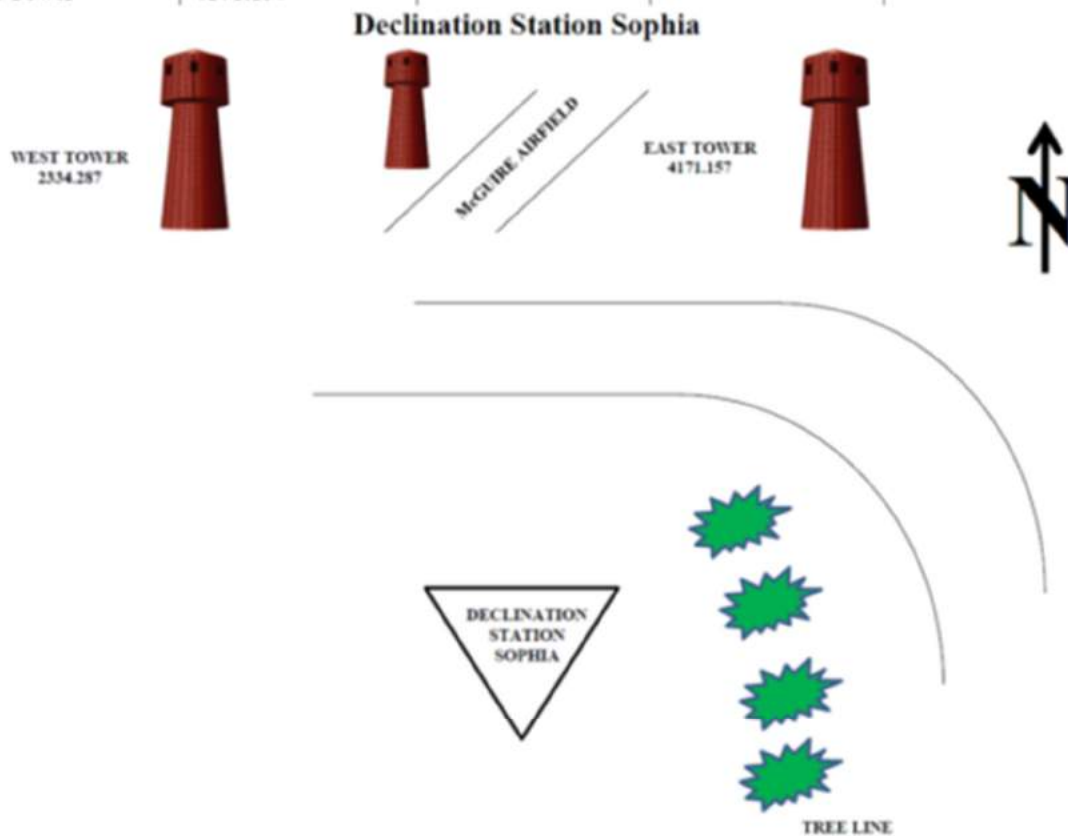
COUNTRY USA		TYPE OF MARK 105mm Shell in Concrete		STATION Declination Station Ruby	
LOCALITY FORT DIX NJ		STAMPING ON MARK		AGENCY (CAST IN MARKS)	
LATITUDE		LONGITUDE		ELEVATION (FT) 58.3 (M)	
(NORTHING) (EASTING) (FT) (M) 546268.40		(EASTING) (NORTHING) (FT) (M) 4429249.21		DATUM WGS 84	
(NORTHING) (EASTING) (FT) (M)		(EASTING) (NORTHING) (FT) (M)		GRID AND ZONE	
				ESTABLISHED BY (AGENCY) 3/112 <sup>th</sup> FA	
				DATE (YYYYMMDD) ORDER 20130222 4 <sup>th</sup>	
TO OBTAIN AZIMUTH		GRID AZIMUTH ADD TO THE GEODETIC			
TO OBTAIN AZIMUTH		GRID AZIMUTH ADD TO THE GEODETIC			
OBJECT	AZIMUTH OR DIRECTION (GEODETIC (GRID) (MAGNETIC))	BACK AZIMUTH	GEOD. DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)	
Radio Tower	0763.147				
Range Tower	2058.855				
Small Pole	3041.082				



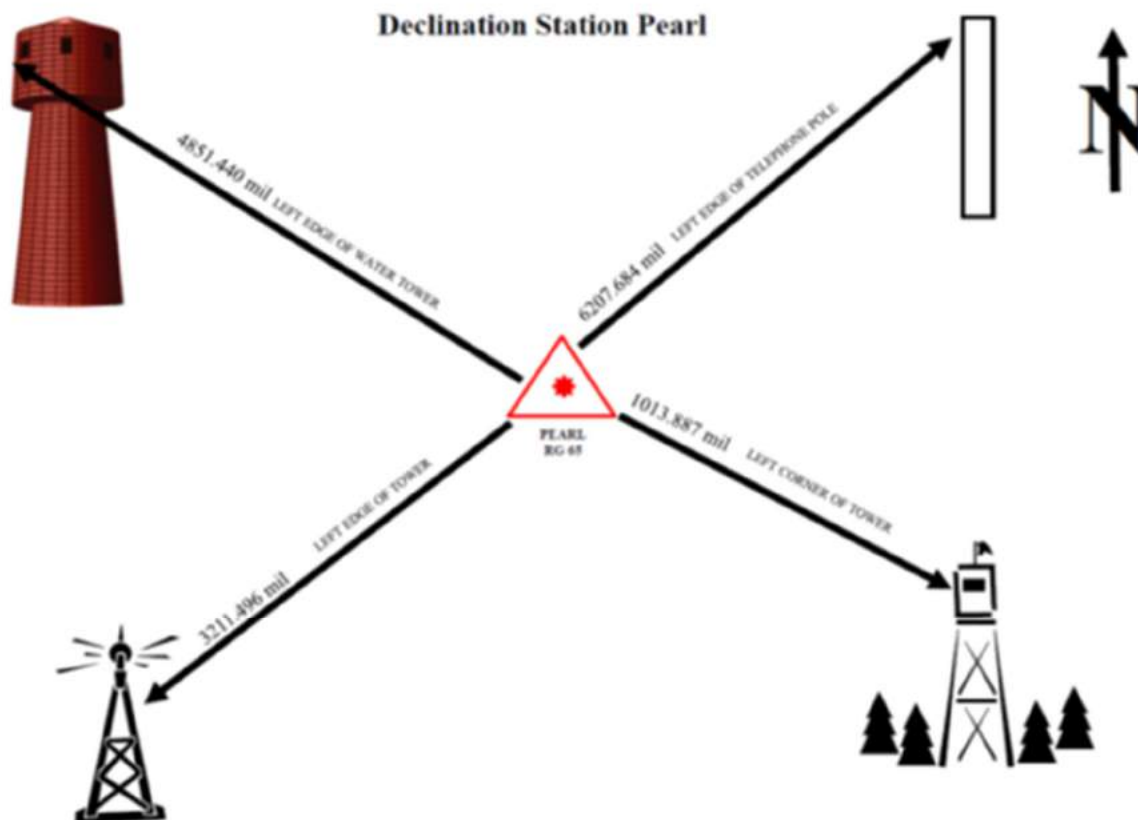
DA Form 1959, Jul 2001 EDITION OF OCT 64 IS OBSOLETE DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION  
FOR USE OF THIS FORM SEE FM 3-34.331; THE PROPONENT AGENCY IS TRADOC



COUNTRY USA		TYPE OF MARK 105mm Shell in Concrete		STATION Declination Station Sophia	
LOCALITY FORT DIX NJ		STAMPING ON MARK		AGENCY (CAST IN MARKS) ELEVATION (FT) 	
LATITUDE		LONGITUDE		DATUM WGS 84	
(NORTHING) (EASTING)  (M) 534477.57		(EASTING) (NORTHING)  (M) 4427899.81		GRID AND ZONE 18T	
(NORTHING) (EASTING) (FT) (M)		(EASTING) (NORTHING) (FT) (M)		GRID AND ZONE DATE (YYYYMMDD) ORDER 20130222 IPADS-4 <sup>th</sup>	
TO OBTAIN AZIMUTH		GRID AZIMUTH ADD		TO THE GEODETIC	
TO OBTAIN AZIMUTH		GRID AZIMUTH ADD		TO THE GEODETIC	
OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD. DISTANCE (METERS)	GRID DISTANCE (METERS)	(FEET)
West Tower	2334.287				
East Tower	4171.157				



COUNTRY USA		TYPE OF MARK Monument with Disk		STATION Pearl	
LOCALITY FORT DIX NJ		STAMPING ON MARK KAMMER SCHWEPPEHEISER		ELEVATION (FT) 58.8 (M)	
LATITUDE		LONGITUDE		DATUM WGS 84	
(NORTHING) (FT) (M) 546462.64	(EASTING) (M) 4431243.05	(EASTING) (FT) (M) 4431243.05	(NORTHING) (FT) (M) 4431243.05	GRID AND ZONE 18T	
ESTABLISHED BY (AGENCY) 3D BN 14 <sup>TH</sup> MARINES		DATE (YYYYMMDD) ORDER 20200719 5 <sup>th</sup>			
TO OBTAIN AZIMUTH		GRID AZIMUTH ADD		TO THE GEODETIC	
TO OBTAIN AZIMUTH		GRID AZIMUTH ADD		TO THE GEODETIC	
OBJECT	AZIMUTH OR DIRECTION (GEODETIC) (GRID) (MAGNETIC)	BACK AZIMUTH	GEOD. DISTANCE (METERS)	GRID DISTANCE (METERS)	GRID DISTANCE (FEET)



DA Form 1959, Jul 2001 EDITION OF OCT 64 IS OBSOLETE

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION  
FOR USE OF THIS FORM SEE FM 3-34.331. THE PROPONENT AGENCY IS TRADOC

## Table F-6. Indirect Fire OIC/RSO Checklist and Certification

1. REFERENCES: AR 385-63; ASAD Pam 350-3; FM 6-40; FM 6-50; FM 3-22.90; FM 3-22.91.

2. OIC/Safety will ensure that all actions in paragraph 3.a through 3.r have been completed prior to calling for a first round and that step 3.s is completed upon completion of firing daily.

3. Initial the space upon completing the action listed:

a. OIC/Safety Officer has read and understands.

(1) ASAD Pam 350-3 \_\_\_\_\_

(2) Chapter 11 (Artillery), Chapter 10 (Mortars) AR 385-63 \_\_\_\_\_

(3) Chapter 11, FM 6-50 (Artillery) \_\_\_\_\_

(4) Section IV, Chap. 1, FM 3-22.90 (Mortars) \_\_\_\_\_

b. References in para 3.a. are on hand on the firing point. \_\_\_\_\_

c. Appropriate TMs and firing tables for the weapon are on hand on the firing point. \_\_\_\_\_

d. Safety data (safety T) is computed and distributed to each firing section daily. \_\_\_\_\_

e. Safety fan is plotted on firing charts (manual FDC) or on operations map (computer equipped FDC). \_\_\_\_\_

f. Lay of unit has been verified by a second aiming circle separated by a minimum of 10 meters from the lay circle with a variance of less than 3 mil between the two. \_\_\_\_\_

g. Both circles used have been declinated on ASA Dix within the last 48 hours. \_\_\_\_\_

h. Verified XO's minimum QE compared with the elevation at minimum range on the safety diagram utilizing the larger of the two values. \_\_\_\_\_

i. A minimum of one serviceable gunner's quadrant is on the firing point. \_\_\_\_\_

j. Sight settings have been checked on each piece. Safety stakes and/or safety tape are emplaced to correspond with safety T. \_\_\_\_\_

k. Ammunition has been inspected and verified as authorized for overhead fire. \_\_\_\_\_

- l. All tubes have been bore sighted IAW applicable manuals. \_\_\_\_\_
- m. Aiming posts and/or collimators are positioned correctly for referred deflection. \_\_\_\_\_
- n. Each firing piece has been visually checked for parallel lay. \_\_\_\_\_
- o. Pits are dug IAW FM 6-50, or an alternate safe method is used for disposal of unused powder increments. \_\_\_\_\_
- p. Air guard instructions have been briefed. \_\_\_\_\_
- q. Pre-fire checks conducted IAW applicable manuals. \_\_\_\_\_
- r. FM communications (36.30 Primary 34.30 Alternate) have been established with Range Control; hourly communication checks will be made, and, in the event, communication is lost we will go to a cease fire status until communications is reestablished. \_\_\_\_\_
- s. A daily record of fire will be transmitted to Range Control prior to 2400 hours; Firing is authorized from 0700-2300 daily. \_\_\_\_\_
- t. Conduct a dry fire verification mission to a target in the impact area, use only authorized charge and shell/fuse combinations for the dry fire verification. \_\_\_\_\_
4. The OIC and Safety Officer will initial each item in para 3 above, sign and date below prior to requesting first round from range control. A checklist must be completed prior to conducting firing every day during the training.
5. This checklist is subject to inspection by range control personnel at any time after the unit obtains a Wet Time. Failure to produce the checklist or failure to maintain communications will be justification for decertification of the OIC/Safety Officer.
6. OIC NAME & RANK: \_\_\_\_\_
- SIGNATURE: \_\_\_\_\_
- SAFETY OFFICER NAME & RANK: \_\_\_\_\_
- SIGNATURE: \_\_\_\_\_
- UNIT: \_\_\_\_\_
- DATE: \_\_\_\_\_ FIRING POINT: \_\_\_\_\_

**Table F-7. Artillery Safety Card/Fan**

Safety Fan #

Date:

Range Safety Signature:

**Artillery Safety Card / Fan**

UNIT:

OIC:

PREPARED BY:

DATES OF FIRING:

ARTILLERY NOMENCLATURE:

ARTILLERY FIRING POINT:

ORDNANCE DODIC & NOMENCLATURE:

MAXIMUM CHARGE:

MAXIMUM RANGE:

MINIMUM RANGE:

MAXIMUM ORDNANCE ELEVATION IN FEET: Feet

= Meters

Max Elevation may not exceed 8000 ft.

Charge Type & Amount / Elevation

Fuze / Time

Left Limit

Right Limit

Azimuth  
Deflection

Azimuth  
Deflection

Firing Point Grid Coordinate:

Mounting Azimuth:

Referred Deflection:

(Front)

USASAFD Form 2254-R, 25 Feb 22

Separate Safety Fan will be prepared for each firing position

MAXIMUM ORD: (FEET)

MAXIMUM RANGE: (METERS)

MOUNTING AZIMUTH: (Mils)

L Mils R Mils

REFERRED DEFLECTION Mils

LEFT LIMIT RIGHT LIMIT

AZIMUTH: Mils AZIMUTH: Mils

DEFLECTION: Mils DEFLECTION: Mils

MINIMUM RANGE: (METERS)

(Back)  
USASAFD Form 2254-R, 25 Feb 22  
Separate Safety Fan will be prepared for each firing position



## F-8. Mortar Safety Card/Fan

Safety Fan #

Date:

Range Control Signature:

### Mortar Safety Card/Fan

UNIT: 2 / 113<sup>th</sup> INF

OIC:

PREPARED BY:

DATES OF FIRING:

MORTAR NOMENCLATURE:

MORTAR FIRING POINT:

MAXIMUM CHARGE:

MAXIMUM RANGE:    Meters    MINIMUM RANGE:    Meters

MAXIMUM ORDNANCE ELEVATION IN FEET:    feet

(HEIGHT MAY NOT EXCEED 8,000 feet)

CHARGE /	MAXIMUM ELEVATION /	FUZE	/	TIME
----------	------------------------	------	---	------

	<u>LEFT LIMIT</u>		<u>RIGHT LIMIT</u>
AZIMUTH	Mils	AZIMUTH	Mils
DEFLECTION	Mils	DEFLECTION	Mils

FIRING POSITION GRID COORDINATES: 18T WK 4630 2920

MOUNTING AZIMUTH:    Mils                      REFERRED DEFLECTION:    Mils

(FRONT)

**USASAFD Form 2255-R, 25 Feb 22**

Separate Safety Fan will be prepared for each Firing Position

MAXIMUM ORD: (FEET)

MAXIMUM RANGE: (METERS)

MOUNTING AZIMUTH: (Mils)

L Mils R Mils

REFERRED DEFLECTION Mils

LEFT LIMIT RIGHT LIMIT

AZIMUTH: Mils AZIMUTH: Mils

DEFLECTION: Mils DEFLECTION: Mils

MINIMUM RANGE: (METERS)

(BACK)

**USASAFD Form 2255-R, 25 Feb 22**

Separate Safety Fan will be prepared for each Firing Position

## Table F-9. SDZ Data

### SDZ Data

Target Location (MGRS):

Min Target Left:

Max Target Left:

Min Target Right:

Max Target Right:

Probable Errors:

Range in Meters:

Deflection in Meters:

**Table F-10. GPS Firing Point Information**

<b>POINT</b>	<b>TYPE FP</b>	<b>DESCRIPTION</b>	<b>MGRS 10 DIGIT</b>
AFP 1	Artillery	Dry Fire Only	18TWK3777630954
AFP 4	Artillery		18SWK4951325375
AFP 5	Artillery	Dry Fire Only	18TWK3861431181
AFP 6	Artillery		18SWK4883324859
AFP 7	Artillery		18SWK4894724971
AFP 8	Artillery		18SWK4947125507
AFP 9	Artillery		18SWK4943025253
AFP 13	Artillery		18SWK4914324592
AFP 14	Artillery		18SWK4909527106
AFP 15	Artillery	Dry Fire Only	18SWK4888227542
AFP 17	Artillery		18SWK4995024111
MFP 1	Mortars	Range 39B	18SWK4802025929
MFP 2	Mortars	Range 39A	18SWK4689225745
MFP 4	Mortars	Range 39B	18SWK4733926219
MFP 5	Mortars	Range 47A	18SWK4826827872
MFP 6	Mortars	Range 59A	18TWK4693628508
MFP 7	Mortars	Range 71	18TWK4616831509
MFP 10	Mortars	Range 75	18TWK4321032097
RG 59C	Artillery/Mortars	Direct Lay	18TWK4630029200
RG 59D	Mortars	Indirect	18TWK4625029600

## **Appendix G**

### **Aircraft Operations** (Reference USASA Fort Dix Regulation 95-1)

#### **G-1. General**

a. Aviation facilities may be requested for short term use consist of Building 4421 the Army Ramp and landing sites (Table G-2. Range Facility Landing Sites). The Aviation Operations Building consists of a Flight Operations Area, briefing areas and latrines. The Army Ramp has limited aircraft space, units utilizing the ramp for other than transit operations are required to provide a parking plan for approval by ASA Fort Dix Aviation Coordinator.

b. Aviation Organizations requesting facilities for aircraft operations and non-aircraft operations are required to submit an AMMS request and a CONOP to the Aviation Coordinator.

(1) Units with organic aircraft conducting training at USASA Fort Dix will note in their CONOP the following information:

- (a) Name of aviation unit providing support
- (b) Type(s) of aircraft
- (c) Number of aircraft
- (d) Number of support personnel
- (e) Type(s) of mission(s) being conducted; include NVG utilization
- (f) Points of Contact and telephone numbers

(2) Aviation units without organic aircraft conducting training at USASA Fort Dix that desire to utilize aviation facilities will note in the CONOP the following information:

- (a) Type of mission(s) being conducted
- (b) Number of personnel utilizing the facilities

c. Non-aviation units conducting training with aviation support utilizing landing zones and or pick-up zones will note in their CONOP the following information:

- (a) Type of mission(s) to be conducted
- (b) Date and time of the mission(s)
- (c) Number of unit personnel conducting the mission
- (d) The aviation unit providing the support to include a POC, e-mail, and

phone number

d. Units with an approved request will attend in person or on Teams the final coordination meeting with Training Division (TD) conducted in Building 9013 Range Control every Wednesday at 1300 ten days prior to the planned training date.

e. Fuel is available at the Army Ramp with proper coordination

f. Weather Services for flight planning purposes may be obtained from the 15th Weather Squadron, Scott Air Force Base, Illinois by computer.

g. Military Flight Plans, DD Form 1801 must be filed with McGuire Airfield

h. Local communications: (See Table G-1; Aviation Communication Card)

#### **G-2. Aircraft Operations** (Reference USASAFD Regulation 95-1)

a. Prior to deploying aircraft within Tactical Areas, Commanders will ensure appropriate Army Regulations and procedures are met.

b. USASAFD Range Complex is in the Restricted Areas R5001 A&B (Figure G-1. Restricted Space R5001 A&B):

(1) The restricted area lies directly east of McGuire Airfield. The western most boundary is as close as 6,250 feet from the easterly edge of McGuire Airfield Runway 06/23. The eastern edge of the area extends to Hornerstown Road just west of Lakehurst's catapult runway

(2) The following procedures apply to any aircraft operating within the vicinity of Restricted Areas R5001 A&B. These procedures do not offer positive aircraft control, nor do they relieve the individual aviator of the responsibility of detailed preflight planning; nor seeing and avoiding other aircraft, hot ranges and firing points. Extreme caution will be used by all aircrews during operations in and around R-5001 A&B

c. Aircraft operating within the USASA Fort Dix Range Area:

(1) Prior to the flight:

(a) Coordination is required with the USASAFD Aviation Coordinator and will include flight crew briefings conducted at least 10 days prior to the flight. This briefing will cover use of landing areas and firing points in the vicinity of the restricted area as well as procedures for acquiring weather information, filing flight plans and coordinating with McGuire Air Force Base Operations and Tower

(b) Prior Permission Required (PPR) request is mandatory for all aviation operations. The request must be submitted 72 hours prior to the operation to the Aviation Coordinator at Commercial (609) 562-6377/3451/4288 or DSN 562-6377/3451, cell 609-649-3743

(c) An Aviation Mission Risk Assessment worksheet is required for air operations and must be forwarded to the Aviation Sections prior to the issuing of the PPR

(4) Flight Plans to include a current Weather Briefing will be filed with appropriate authorities and a copy filed with the unit's operations section. When departing from the Army Ramp, a flight plan (DD Form 1801) and a PAX Manifest will be faxed to (609) 754-6465, or hand carried to McGuire AMOPS.

(2) During the flight:

(a) All tactical/administrative aircraft operations are conducted under VFR conditions. Operations under IFR conditions are prohibited in R5001, note: When operations are being conducted in McGuire Control Zone, McGuire Approach may grant a Special IFR clearance

(b) Flights entering into the Restricted Area must contact the Fire Desk at Range Control (36.30) prior to entering (Table G - 1. Aviation Communication Card)

(c) Rotary wing aircraft flying in R5001 range area must fly no lower than 200 feet AGL and no higher than 800 feet AGL along the designated air corridors (Figure G-2. Restricted Space Air Corridors). Aircraft crews will notify the Range Fire Desk as to which corridor they are on and the direction of flight

(d) Aircraft operating within the cantonment areas are required to contact McGuire Tower prior to entering McGuire traffic area and or McGuire Air Space



**G-3. Landing Zones and FARP Locations** (Reference Fort Dix Regulation 95-1)

a. Landing Zones (LZs) or Pick-Up Zones (PZs) are designated throughout the USASA Fort Dix. They are located by a 6-digit coordinate (Table G-2 Lists Range Facility Landing Sites)

b. To request a landing zone that has not been previously approved, complete the following:

(1) A memorandum on official letter head signed by the unit Safety Officer will include the number and type of aircraft, the type of mission to be conducted, the mission task requirements, and any other pertinent information.

(2) Complete a landing site survey (Limited use Helicopter Landing Site Survey Checklist or a local unit form approved by the Aviation Coordinator).

(3) Submit the documents to the Aviation Coordinator no later than 15 days prior to the training event date

(4) After request review and landing zone survey is approved or disapproved, the unit will be notified of decision by the Aviation coordinator.

**G-4. Aerial Rotary Wing Gunnery** (Reference Fort Dix Regulation 95-1)

a. Door or Side Gunnery will be conducted on Range 85, and in the aerial gunnery impact area (18T WK 4400 2990 - 4565 2900 - 4640 2825 - 4400 2828)

b. Diving Fire Gunnery will be conducted in the aerial gunnery impact area (18T WK 4400 2990 - 4565 2900 - 4640 2825 - 4400 2828)

c. Aerial Platform Gunnery will be conducted on Range 85. The minimum altitude for Aerial Platform Gunnery is at 100ft. AGL

d. Authorized FARRP locations are located on Range 85 for ordnance only and LZ 59E can be used as a refueling point only

e. Ordnance that aircraft may employ during Aerial Gunnery inside of R5001:

(1) Authorized ordnance to be employed on Range 85: 5.56 ball and tracer, 7.62mm ball and tracer, 50cal ball and tracer, and 50cal sniper.

(2) Authorized Ordnance to be employed in the aerial gunnery impact area (18T WK 4400 2990 - 4565 2900 - 4640 2825 - 4400 2828): 7.62mm ball and tracer, 50cal ball and tracer, 20mm target and target tracer (HE DODIC: A651), 2.75 rockets practice and HE (HE DODIC: H842 with M151 War Head), practice bombs, flare, and hand dropped smoke grenades

Note: Other DODICs may be authorized by submitting a memorandum listing the DODIC, the location where the ordnance will be employed and a justification for usage signed by an O6. The completed memorandum will be forwarded for review to the ASA Fort Dix Range Safety Office. After a determination has been made, a written decision will be provided to the requester.

**G-5. Unmanned Aerial Systems (UAS)** (Reference Fort Dix Regulation 95-1)

Only Military, Federal Agencies, and Civil Authorities may request to operate UAS within R5001. All UAS Operations are prohibited within the boundaries of JB MDL Cantonment Area.

a. Required documentation to conduct a UAS operations in R5001, Table G-3  
Example Memorandum:



Figure G-2. Restricted Space Air Corridors

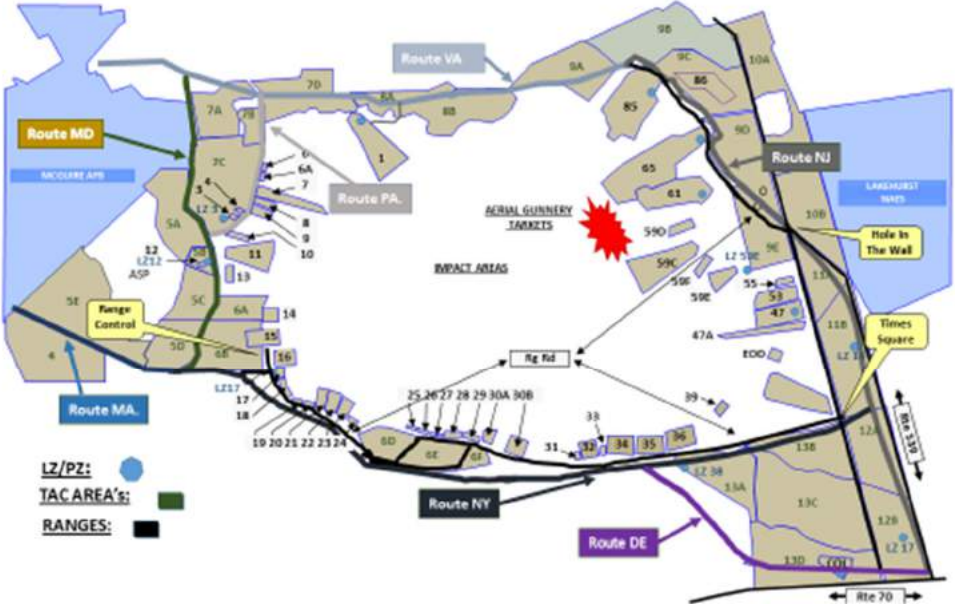


Table G-1. USASA Fort Dix Aviation Communication Card

1. McGuire Airfield:

- a. ATIS - 110.6            270.1
- b. Approach Control:
  - 270-090            120.25            363.8
  - 091-269            127.5            259.3
- c. Tower -    119.8            255.6            118.65
- d. Ground -    121.8            275.8
- e. CLNC DEL -    135.2            335.8
- f. AMOPS Land Line: 609-754-2712
- g. Transient Alert Land Line: 609-754-2631

2. Fort Dix:

- a. Army Aviation Operations:
  - (1) 36.30    139.3            265.6
  - (2) Land Line: 609-562-3451, 6377, 4288
  - (3) Cell: 609-649-3473
- b. Range Control:
  - (1) Primary FM: 34.30
  - (2) Alternate/ Aviation Ops FM: 36.30
  - (3) Admin Freq: 148.875
  - (4) Land Line: 609-562-4600
- c. Training Management Land Line: 609-562-2001, 2002, 2003
- d. USASA Fort Dix EOC Land Line: 609-562-3011

3. Lakehurst

- a. NAS:
  - (1). Tower 127.77            360.20
  - (2). Land line: 732-323-4995/243
- b. NJARNG Avn:
  - (1). Freq:    32.075            2424.00
  - (2). Flt Ops Land Line: 732-408-4239

4. Warren Grove:

- a. Tactical 286.2
- b. Admin 296.20

5. JEMSTAR Communication Freq:

- a. NJ Fire Net: 154.265
- b. JEMS 2: 155.340
- c. JEMS/SPENS: 153.785

Table G-2. Range Facility Landing Sites

LZ DESIGNATION		GRID	REMARKS
TACTICAL NAME	ADMIN NAME		
ASA Ft. Dix CMD PD Pad	ASA Ft Dix Command	WK 324296	Location: Scott Plaza and Delaware Ave. ASA FT Dix Command Approval Only
ASA Ft. Dix Army Ramp	ASA Army	WK 338291	Location: Flt Line, Hotel/Victor Taxi Way
ADMIN PD RG 1	LZ 1 (ARDC)	WK 409313	Vicinity of Range 1 R5001 A, B
ADMIN PD RG 17	LZ 17		
ADMIN PD RG 38	LZ 38	WK 464255	Vicinity of Range 38 – Limited Usage R5001 A/B
ADMIN PD RG 47	LZ 47	WK 482282	Vicinity of Range 47 - Limited Usage R5001 A/B
ADMIN MEDEVAC 1	LZ 29	WK 425257	Vicinity of Range 29 – Medevac Only R5001 A/B
ADMIN MEDEVAC 2	LZ UTES	WK 460330	Vicinity of UTES- Medevac Only R5001 A/B
RG 61 LZ/PZ	LZ 61	WK 465301	Vicinity of Range 61-Aerial Gunnery R5001 A/B
RG 65 FAARP	LZ 65	WK 464311	Vicinity of Range 65-Aerial Gunnery R5001 A/B
RG 85 FAARP	LZ 85	WK 454323	Vicinity of Range 85-Aerial Gunnery R5001 A/B
ALBATROSS (LZ59E)	FARRP	WK 4722870	Vicinity of Range 59E
PEACOCK	LZ 3	WK 381296	Vicinity of Range 3 R5001 A
FLAMINGO 5)	LZ 5 (DTA	WK 474302	Vicinity of Drive Training Area 5 Medevac Only R5001 A/B
CROW	LZ 12	WK 378289	Vicinity of Range 12 R5001 A
CARDINAL	AFP 14	WK 492272	Vicinity of Artillery Firing Point 14 R5001 A/B
JAY	AFP 13	WK 491245	Vicinity of AFP 13 R5001 A/B
PIGEON	AFP 17	WK499239	Vicinity of AFP 17 R5001 A/B
FALCON	LZ COL	WK 486232	Vicinity of TAC 13D/ASA Ft Dix COL R5001 A/B
OWL	LZ ETS	WK 493259	Vicinity of Engineer Training Site Limited Usage and Medevac R5001 A/B
SPARROW ASP)	LZ 1A (Old	WK 297303	Vicinity of TAC 1A Old ASP
BUNTING		WK301304	Vicinity of TAC 1A and the Old ASP
KIWI	LZ BRF	WK 309307	Location: Florida Ave and Technology Dr. Limited Usage
LARK	LZ LD 1	WK 331264	Vicinity of CTT Site- Medevac Only
BUZZARD	LZ T3C	WK342268	Vicinity of IR Site Tac 3C
ROBIN	Land Nav 1 LZ	WK332273	Vicinity of Land Nav 1

## LZ/PZ Guide

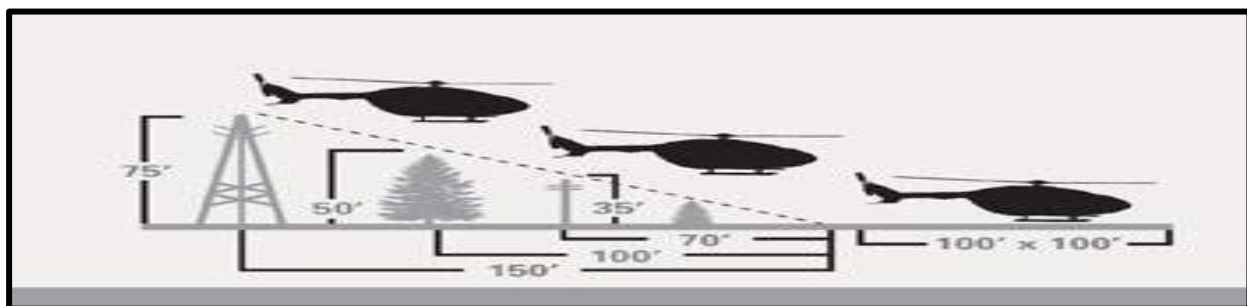


Table G-3. Sample ASA Fort Dix UAS Request

(Name of Unit or Organization)  
UAS FLIGHTS  
(Unmanned Aircraft. System)  
USASA FORT DIX, NEW JERSEY

1 January 2022

DATES REQUESTED: 1 Mar – 6 Mar 2016

QUANTITY: 2 Swiper SUAS  
2 Condor SUAS  
1 SkyNet/Small Balloon

TYPE:

1. Swiper SUAS (Fixed Wing/Unmanned Aircraft. System)

Wingspan: 36 inches

Length: 40 inches

Weight: 3.5 lb. including payload

Launch Method: Hand-Launched

Recovery Method: Deep-Stall Vertical Landing

Frequency of Control Link: 900 MHz

Frequency of Data/Video Link: 2.2 – 2.3 GHz (S-Band)

2. Condor SUAS (Small Helo/Unmanned Aircraft. System):

Wingspan: 48 inches

Length: 48 inches

Weight: 13 lb. including payload

Launch Method: Hand-Launched

Recovery Method: Deep-Stall Vertical Landing

Frequency of Control Link: 900 MHz

Frequency of Data/Video Link: 2.2 – 2.45 GHz (S-Band), 1798-1830 MHz (L-Band)

3. SkyNet (Small Balloon):

Wingspan: N/A

Length: 12 Ft. diameter

Weight: lighter than air

Launch Method: no launch, tethered

Recovery Method: tethered

Frequency of Control Link: 900 MHz

Frequency of Data/Video Link: 2.2 – 2.45 GHz (S-Band), 1798-1830 MHz (L-Band)



LOCATION(S): SUAS launch, and recovery (to include all flight mission operations) will be conducted within each range area by local range authority. Aircraft will fly into a pre-determined area of operations within the approved area only. The purpose of SUAS flights is to provide Tactical Full Motion Video (FMV) in support of training. Training objectives involve Condor SUAS, Swiper SUAS, ISR, and FMV familiarization training. The following range areas and times are requested:

DTA5	(3 and 5 March)	1100-1500 and 1700-1900 hrs.
TAC9D	(1 March only)	1100-1500 and 1700-1900 hrs.
Range 59F	(1 and 3 March)	1100-1500 and 1700-1900 hrs.
LZ 59E	(1 and 3 March)	1100-1500 and 1700-1900 hrs.
Range 12	(2, 4, and 6 March)	1100-1900 hrs.
LZ 12	(2, 4, and 6 March)	1100-1900 hrs.

ALTITUDE:

0-500 ft. AGL.

Range: 2-3 NM

SUAS Cruise Speed: 20-70 knots

Note 1: Loss of link and recovery will comply with risk management worksheet. After launch, the SUAS will be under pre-programmed flight control unless the operator overrides and establishes manual control. If the control link is lost, Condor will return to and land at launch point (i.e., called the "home" point).

POC: Mr. UAS Tech  
S-3 Swiper Team OIC  
Cell: 000-000-0000  
E-mail:

Alternate POC: SFC SUAS  
SUAS Operator  
Cell: 000-000-0000  
E-mail

John J. Smith  
LTC, AVN  
Commanding

## **Appendix H**

### **Environmental Protection and Conservation**

#### **H-1. General**

- a. Environmental protection and conservation of resources are the responsibility of all personnel utilizing USASAFD Range Complex and Training Areas.
- b. The key to preventing environmental damage is to understand that unit actions affect the environment and individual decisions can either prevent or exacerbate environmental damage. It is imperative that leaders plan their training to minimize damage and are prepared to respond appropriately to any situation that might arise. Risk assessments must address environmental concerns and control factors.
- c. The key to mitigation when a spill or hazard incident occurs is to contact the Range Operations Firing Desk, 609-562-4600, immediately. The firing desk operator will contact the Fire Dept. response team.

#### **H-2. Procedures**

This appendix outlines procedures that units will utilize to minimize environmental damage and actions to be taken should problems arise during training. This appendix will cover natural resource management, hazardous substance management and fire prevention. Although a part of environmental protection, range sanitation procedures are covered in Appendix P of this pamphlet.

### **Table H-1. Natural Resource Management**

#### **H-1-1. Destruction**

Commanders will ensure that no wanton or deliberate destruction of natural resources occur during training exercises.

#### **H-2-2. Vehicles**

Vehicles cause significant damage to roads, trails and training land. Careless operation of vehicles damages road shoulders, drainage ditches and berms accelerating erosion; heavy vehicle traffic destroys the ground cover and vegetation that holds the soil in place. Compacted soil reduces the ability of vegetation to survive, and ruts can cause run off; heavily eroded areas can cause training areas to be closed to training for rehabilitation. For more information concerning vehicle operations refer to Appendix O, Vehicle Operations.

#### **H-1-3. Tree Plantations**

Tree stands are off limits to all vehicles and any training involving the use of pyrotechnics and smoke operations. Transient foot traffic is authorized but should be kept to a minimum.

#### **H-1-4. Camouflage**

- a. Cutting, nailing, debarking or damaging live trees is not authorized without permission from the JB MDL Environmental Office. Any request should be forwarded thru the USASAFD Range Operations for consideration.
- b. The use of dead and fallen trees as camouflage is authorized.

#### **H-1-5. Water**

- a. The use of water from streams and ponds to wash vehicles is not authorized.
- b. Streams and wetland areas can be crossed at approved crossing sites; vehicle sites will have metal grating spanning the water for fording.
- c. Water crossing operations should be planned and conducted to minimize damage to the environment.

#### **H-1-6. Excavations**

- a. Before any digging can occur on JB MDL a request must be made through the Engineering section of the 87 CES. The process allows for all offices within Engineering and Environmental from the Joint Base to review and approve or deny with reason the proposed digging site. Directions are contained in the attached, "Work Clearance Requests/Dig Permit."
- b. The only area currently authorized to conduct major digging operations is the Engineer Training Area in TAC 12A. Digging permit requests need not be submitted to conduct excavation in this area.
- c. All areas of excavation will be marked with barriers, i.e., engineer tape to prevent personnel from injuring themselves by falling into the holes and it will also make the areas easier to locate.
- d. All holes will be filled in prior to requesting a joint inspection from Range Operations prior to a unit clearing USASAFD.

### **Table H-2. Hazardous Substance Management and Containment**

#### **H-2-1. Spills**

Strict New Jersey Environmental Laws require units to report any spills of the following items: contact the Range Operations Firing Desk, 609-562-4600, with the location and type of contaminant:

- |                             |                              |
|-----------------------------|------------------------------|
| a. Oils                     | g. Grease                    |
| b. Brake Fluid              | h. Decontamination Agents    |
| c. Fuels                    | i. Pesticides                |
| d. Battery Acid             | j. Solvents                  |
| e. Antifreeze               | k. Hydraulic Fluids          |
| f. Paints and Paint Thinner | l. Any other Toxic Substance |

#### **H-2-2. Reduction of Spills**

- a. Commanders will ensure maximum effort is employed to reduce the effects of spills by incorporating the following procedures into unit SOPs while training at USASA Fort Dix:
  - (1) Minimize the use of hazardous substances

(2) Conduct maintenance in areas where spills can be contained, and damage minimized.

(3) Bulk fuel operations may be conducted only with the use of containment vessels; you will report the ten-digit grid coordinate of the location of any fueling operation to Range Operations ten (10) days prior to training for area reconnaissance and approval.

(4) When conducting fueling operations, personnel will be appointed to provide over-watch of the operation ensuring that personnel provide positive control of the fueling nozzles, and that the nozzles are stored in containment vessels.

(5) Leaders will inspect fueling points daily while training.

(6) Drip pans will be used for all vehicles

(7) Spill kits are required by all units conducting fueling operations or maintenance operations; units will provide their own spill kits.

### **H-2-3. Reporting Spills**

In the event of a spill, contact Range Operations Firing Desk (609) 562-4600/4650 and immediately begin to contain then clean up spills. A Range Operations representative will be dispatched to assess the extent of the spill, if the unit is unable to contain the spill the 87th Fire Department will be dispatched to stop the flow of fluids. The organization causing the spill is responsible for the full cost of cleaning up the spill and returning the training area to its original state.

### **H-2-4. Batteries**

Batteries are considered hazardous waste and will not be placed in any of the trash containers on USASAFD. Batteries can be turned in at the hazardous waste material storage site located at Building 8131 Old Range Road.

### **H-2-5. Hazardous Material Storage**

Fuel Cans, lubricants and other hazardous packaged material must be stored in containers large enough to contain the entire contents of the material stored plus an additional three (3) inches of freeboard. The storage containers must be covered with canvas to prevent the accumulation of water.

### **H-2-6. Grey Water**

Water from showers, wash stations and cooking will be collected in grey water storage tanks and emptied by a contractor. Units will identify their requirements for grey water tank support in their training request to TMD ASA Dix Form 2203. During the training coordination meeting held every Wednesday units will coordinate for the positioning of gray water containers.

### **H-2-7. Solid and Liquid Waste Disposal**

a. Garbage will be bagged and collected at either Range Operations H.Q. Bldg. 9013 Range Road or in dumpsters pre-positioned within training sites for exercises. Pre-positioned dumpsters must be monitored by using units for proper segregation of materials. No lumber, scrap metal or plastic target materials may be comingled with general refuse. When the container is approximately  $\frac{3}{4}$  full contact Range Operations,

(609)562-4652/4650, and request the container be emptied; **DO NOT WAIT FOR THE GARBAGE TO OVERFLOW ONTO THE GROUND!** You will be required to pick up the overflow.

b. Containers for lumber, scrap metal, cardboard/paper and plastic targets are located at Range Operations H.Q. Bldg. 9013 Range Road. These containers will be labeled clearly with signs. Ensure strict adherence and do not commingle garbage and recyclable materials.

c. Cardboard will be flattened and collected in single container separated from all general refuse. Cardboard collection containers are clearly marked and distinctly different from general refuse containers.

d. Pallets will be collected and transported to the JB Recycle Center at 2321 Radin Road, JB MDL. Contact (609) 754-8293 to determine operating hours.

e. All hazardous waste material generated will be disposed of at the HAZMAT collection site at Building 8131 Old Range Road, JB MDL. Hours of operation 0700-1630 Monday thru Thursday or call (908) 910-3735.

f. All materials received from the ASP will be returned to the ASP in order to clear the hand receipt. DO NOT place any item to include pallets, banding, packaging materials or ordnance items expended or live ammunition into any dumpster on JB MDL.

g. For any material uncertainty or need clarification, contact the 87 CE/Hazardous Waste (609) 562-6167.

### **Table H-3. Fire Prevention**

The Range Operations firing desk will monitor fire condition codes daily; during severe weather conditions with winds higher than 35 mph or extended drought conditions, Range Control will initiate procedures through the Range Safety Officer to cease the use of all pyrotechnics during training.

#### **H-3-1. Fire Codes**

a. Prior to using any fire producing pyrotechnics i.e., smoke grenades, smoke pots, trip flares, star clusters and artillery simulators etc. plus tracer ammunition, the OIC/RSO will obtain the current fire code from Range Control. Failure to follow Fire Code restrictions can result in fires causing lost training time and unnecessary damage and expense.

b. The current fire codes on JB MDL:

(1) Green - No Restrictions

(2) Amber - No pyrotechnics of any kind unless cleared by the 87<sup>th</sup> CE/Fire Department and/or Range Control.

(3) Red - No tracers unless cleared by the 87<sup>th</sup> CE/Fire Department and/or Range Control.

#### **H-3-2. Open Fires**

Open fires are not authorized in the USASA Fort Dix training areas.

### **H-3-3. Heaters and Heater Fuel**

a. The use of fuel heaters in the training area is limited to those heaters approved for use by each specific military service. Personnel are required to provide documentation authorizing the use of their specific heaters if they do not adhere to army standards.

b. The following heaters are currently authorized for Army use:

- (1) M-1941 (Pot Belly)
- (2) M-1950 (Yukon)
- (3) H-45 (Space Heater Medium), NSN 4520-01-329-3451
- (4) Space Heater Arctic (SHA), NSN 4520-01-444-2375
- (5) Space Heater Small (SHS), NSN 4520-01-478-9207
- (6) Space Heater Convective (SHC), NSN 4520-01-431-8927
- (7) Thermal Electric Fan, NSN 4520-01-457-2780

c. Fuel heaters will only use the authorized fuels for the particular heaters; gasoline is not authorized for fuel under any circumstance.

### **H-3-4. Field Mess Operations**

a. Units will ensure that:

(1) All combustible materials are cleared to a distance of three (3) feet around field ranges and immersion heaters.

(2) The fuel supply and filling point will be located at least 50 feet from the ignited units.

b. In extremely dry conditions, the fire department may suspend messing operations.



	<h2 style="text-align: center;">Work Clearance Requests/Dig Permits</h2>	<p style="text-align: center;"><b>Joint Base McGuire- Dix- Lakehurst (JB-MDL)</b></p>
<p style="text-align: center;"><b>Work Instructions</b></p>		

Uncontrolled copy – Master protected electronically

Department:	<b>Work Control</b>	Number:	
Originator:	Patricia Warren	Effective Date:	
Approver:	General Manager	Revision:	

**SUMMARY OF CHANGES:** New document.

**PURPOSE:**

Establish a work instruction for processing AF Form 103 Work Clearance Requests and Markout Requests.

**INPUT:**

**Associated Documents:** JB –DIX Markout Request Form (205.10.01.JN JB DIX - PRIDE MARKOUT REQUEST FORM) and AF IMT 103 Work Clearance Request Form (AF IMT 103 Form)

**OUTPUT:**

**Records**

- EAM WO Card
- Approved AF 103 Work Clearance Request/Dig Permit (Signed **AF IMT 103 Form**)
- "AF IMT 103 BCE Work Clearance Requests" Log Book

**DESCRIPTION / CHECKLIST:**

- The AF IMT 103 Form is used for any work (Contract or In-House), that may disrupt aircraft or vehicular traffic flow, base utility services, base communication cables, protection provided by fire and intrusion alarm systems, or routine activities of the installation. This form is used to coordinate the required work with key base activities and keep customer inconvenience to a minimum. It is also used to identify potentially hazardous work conditions in an attempt to prevent accidents. A Complete AF IMT 103 Form that has been signed by an Approving official will serve as a "Dig Permit" or "Work Clearance".
- The JB –DIX Markout Request Form is used to document requirements of Lateral Sewer, Water, Steam, Storm and Secondary Electric Line and Post Indicators for Fire Suppression Water Lines Markout Services to be performed by PRIDE.

<p style="font-size: small;">The information contained herein is proprietary to PRIDE Industries and shall not be reproduced or disclosed in whole or in part or used for any other purpose except when such user possesses direct, written authorization from PRIDE Industries. Uncontrolled copy – Master protected electronically</p>	<p style="text-align: right;">Form # 100-3 JBMDL Revised Date: 1-FEB-11 Page 1 of 3</p>
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## Work Clearance Requests/Dig Permits

### Work Instructions

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**SECTION 1** – When excavation and/or other work for which an "AF IMT 103 Form" is required, the **Requestor** will initiate the form by:

- completing fields 1 through 3 and 5 through 7
  - *LEAVE # 4 Blank – this will be populated with the date the Work Clearance is approved.*
- contact NJ 1 Call (1-800-272-1000 or <http://www.nj1-call.org/> ) and provide Ticket # in field 14 (It is the **Requestor's** responsibility to initiate this process and follow up with NJ 1 Call)
- Provide a sketch or map drawn to scale indicating area where Markout is required.

**SECTION 2** – The requester completes and signs the "JB –DIX Markout Request Form"

**SECTION 3** – Both the "AF IMT 103 Form" and the "JB –DIX Markout Request Form" are received by PRIDE Customer Service [**PRIDE CSU**].

- **PRIDE CSU** will enter an EAM Work Order (AIJO) for **PRIDE Markout Survey Technician** to use as Work Order Card.
- **PRIDE CSU** will annotate the EAM Work Order number on the "The JB –DIX Markout Request Form" and provide **Requestor** a Copy of this document. The EAM Work Order number will be used to reference this service request until it has been completed.
- **PRIDE CSU** will Log the "The JB –DIX Markout Request Form" in the "AF IMT 103 BCE Work Clearance Requests" Log Book.

**SECTION 4** – **PRIDE CSU** will create a Work Clearance Request Ticket in the CE Tools Portal

- **PRIDE CSU** will upload AF IMT 103 Form and any associated documentation provided by **Requestor** as an attachment in the CE Tools Portal
- **PRIDE CSU** will assign remaining Coordinating Agencies to review Work Clearance Request (Communications, Fire, Security, POL, Environmental, Sewer, etc.)

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Form # 100-3 JBMDL  
Revised Date: 1-FEB-11  
Page 2 of 3



## Work Clearance Requests/Dig Permits

### Work Instructions

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**SECTION 5 – PRIDE Markout Survey Technician** will perform required Markout Services to include – Secondary Electrical, Steam Distribution, Water Distribution and Storm Lines.

- When Service has been completed - Markout Survey Technician will sign off on "**JB –DIX Markout Request Form**" being complete and turn in to **PRIDE CSU**.

**SECTION 6 – PRIDE CSU** will update Coordination for the elements marked out by **PRIDE Markout Survey Technician** in the CE Tools Portal Work Clearance Request Ticket

**SECTION 7 –** When all required Coordination and Work Clearance Request review has completed in the CE Tools Portal, **PRIDE CSU** will move the request to "Awaiting Signature" in the CE Tools Portal

**SECTION 8 –** Once Signature has been obtained,

- **PRIDE CSU** will update the DATE OF CLEARANCE (Block 4 on the AF103 Form) with the Approval Date
- **PRIDE CSU** will update Log and PRINT the approved AF 103 Work Clearance Request Document
- **PRIDE CSU** will provide a copy of the Approved AF IMT 103 Work Clearance Request to the **Requestor**
- **PRIDE CSU** will maintain a copy of the Approved AF IMT 103 Work Clearance Request

**SECTION 9 – Requestor** will ensure a copy of the approved AF 103 Work Clearance Request is kept on site at the location where the work is being performed. This documentation shall serve as the Dig Permit and a copy must be retained on site during performance of the work requiring this document.

**SECTION 10 –** Upon completion of the work performance requiring the AF IMT 103 Work Clearance Request, the **Requestor** shall notify **PRIDE CSU**

- **PRIDE CSU** will update the LOG with the appropriate date of completion
- **PRIDE CSU** will provide a copy of the closed AF IMT 103 Form to the **Requestor** within 5 working days.

<b>BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST</b> <i>(See Instructions on Reverse)</i>		DATE PREPARED
1. Clearance is requested to proceed with work at _____ on Work Order No. _____, Contract No. _____, involving excavation or utility disturbance per attached sketch. This area <input type="checkbox"/> has <input type="checkbox"/> has not been staked or clearly marked.		
2. TYPE OF FACILITY/WORK INVOLVED <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> A. PAVEMENTS</div> <div style="width: 33%;"><input type="checkbox"/> D. FIRE DETECTION &amp; PROTECTION SYSTEMS</div> <div style="width: 33%;"><input type="checkbox"/> G. AIRCRAFT OR VEHICULAR TRAFFIC FLOW</div> <div style="width: 33%;"><input type="checkbox"/> B. DRAINAGE SYSTEMS</div> <div style="width: 33%;"><input type="checkbox"/> E. UTILITY <input type="checkbox"/> OVERHEAD <input type="checkbox"/> UNDERGROUND</div> <div style="width: 33%;"><input type="checkbox"/> H. SECURITY</div> <div style="width: 33%;"><input type="checkbox"/> C. RAILROAD TRACKS</div> <div style="width: 33%;"><input type="checkbox"/> F. COMM <input type="checkbox"/> OVERHEAD <input type="checkbox"/> UNDERGROUND</div> <div style="width: 33%;"><input type="checkbox"/> I. OTHER</div> </div>		
3. DATE CLEARANCE REQUIRED		4. DATE OF CLEARANCE
5. SIGNATURE OF REQUESTING OFFICIAL		6. TELEPHONE NO.
7. ORGANIZATION		
ORGANIZATION	REMARKS <i>(Use Reverse for additional)</i>	REVIEWER'S NAME AND INITIALS
8. A. ELECTRICAL DISTRIBUTION		
B. STEAM DISTRIBUTION		
C. WATER DISTRIBUTION		
D. POL DISTRIBUTION		
E. SEWER DISTRIBUTION		
F. ENVIRONMENTAL		
G. PAVEMENTS/ GROUNDS		
H. FIRE PROTECTION		
I. ZONE _____		
J. OTHER <i>(Specify)</i>		
9. SECURITY POLICE		
10. SAFETY		
11. COMMUNICATIONS		
12. BASE OPERATIONS		
13. CABLE TV		
14. COMMERCIAL UTILITY COMPANY <input type="checkbox"/> TELEPHONE <input type="checkbox"/> GAS <input type="checkbox"/> ELECTRIC		
15. OTHER <i>(Specify)</i> _____		
16. REQUESTED CLEARANCE <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED		
17. TYPED NAME AND SIGNATURE OF APPROVING OFFICER <i>(Chief of Operations Flight or Chief of Engineering Flight)</i>		17a. DATE SIGNED

AF IMT 103, 19940801, V3

PREVIOUS EDITIONS ARE OBSOLETE.

#### INSTRUCTIONS

The BCE work clearance request is used for any work (contract or in-house) that may disrupt aircraft or vehicular traffic flow, base utility services, protection provided by fire and intrusion alarm system, or routine activities of the installation. This form is used to coordinate the required work with key base activities and keep customer inconvenience to a minimum. It is also used to identify potentially hazardous work conditions in an attempt to prevent accidents. The work clearance request is processed just prior to the start of work. If delays are encountered and the conditions at the job site change (or may have changed) this work clearance request must be reprocessed.

18. REMARKS. (This section must describe specific precautionary measure to be taken before and during work accomplishment. Specific comments concerning the approved method of excavation, hand or powered equipment, should be included.)

Drilling rigs or equipment over 25 feet high require FAA clearance on JBMDL. See Community Planner for approval.

I understand that I must contact all required organizations as indicated on the Clearance Review Remarks. I understand that the utilities and other conditions as indicated in the contract plans and Specifications are approximate locations (5 feet on either side) and that I will excavate and do other required work carefully, and by hand if necessary, to protect them and to determine their exact locations as needed to perform the required work in this contract. I will re-validate this permit every 30 days by re-submitting (Renewal) if necessary (10 business days) prior to the date of expiration. I understand that failure to do this every 30 days will void this permit. I also understand that I will be liable to repair any damages caused by my failure to comply with the above requirements.

Contractor or Representative(Name and Company):

Contractor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Dates of Excavation will exist (from time work starts until construction is brought to grade and excavation is back-filled)

Start Date: \_\_\_\_\_ Completion Date \_\_\_\_\_

THIS PERMIT IS INVALID WITHOUT A SKETCH DRAWN TO SCALE, ATTACHED OR PASTED BELOW

## **Appendix I**

### **Contingency Operating Location (COL) Victory**

#### **1. Purpose**

This appendix establishes the procedures for scheduling the COL for Reserve Training Exercises, Annual Training (AT), Battle Assembly (BA) Training, and the Standard Operating Procedures for COL Victory.

#### **2. General**

a. COL Victory, located in TAC 13D, has a primary function of Theater Immersion Training and administrative use during Mobilization, USARC Exercises, Annual Training, and Battle Assemblies.

b. The Administrative (Mayor) cell is responsible for day-to-day operations and coordinating maintenance of the facility. The Range Q.A. Representative is responsible for all operations and is located in Building 96168 at the COL with an office phone number of (609) 562-4552; cell (609) 306-7538.

#### **3. Scheduling Procedures**

a. Units will submit requests to utilize the COL using the USASA Fort Dix Training Support Request Form 2203 submitted to Training Division (TD) at least 60 days prior to training dates. The form will be completed with personnel numbers, meal requirements, and any specific training or logistical requirements during their training. If the request is approved, TD will process the training request with all logistical support requirements, the unit will then be instructed to contact the COL Mayor Cell for direct coordination.

b. All units, regardless of service alignment or status, will be charged a fee for use of the COL IAW USASA Fort Dix Reimbursement Policy. In addition, a fuel consumption charge will be levied during the winter months from 15 October thru 15 April.

#### **4. ADVON Instructions**

a. Contact COL Contractors (609) 562-8522 24 hours prior to main body's arrival.

b. A senior NCO will sign-in at the COL Ops Building 96168, personnel will report in military uniform with I.D. cards and a USASA Fort Dix Range Card.

c. Critical Tasks.

(1) Supply – DA Form 1687 with Assumption of Command Orders; receive tent assignments, parking lanes, and AZTECs; review turn-in clearing procedures

(2) Administrative:

(a) Receive and sign for welcome packet; conduct orientation tour

(b) Provide unit occupancy information on CD containing:

(1) Alpha roster with Soldiers' gender

(2) Vehicle inventory by type with bumper number

(3) Sensitive items inventory with serial numbers

(4) Key leaders contact roster (cell numbers & email)

d. A DD Form 2977 outlining the fire safety plan for the tent occupation will be turned in when signing into the COL.



## 5. Daily Operational Instructions

- a. One fan is provided for each tent. Do not move fans. If a fan breaks, contact COL Supply.
- b. Only personnel on the DA Form 1687 will sign for additional tents and equipment.
- c. Sleeping tents only have 5 amps of electrical power and will not support multiple extension cords with surge protectors. Only TOC tents can handle extra equipment.
- d. Signs will be hung on both sides of tents occupied by female personnel designating them as females only.
- e. Folding chairs are only provided for the Whiskey tents. Do not remove them to the sleeping tents. If you require more chairs, contact the COL Supply.
- f. If the HVAC is turned on in the Whiskey tents, the doors will remain closed.
- g. Units will recycle in dumpsters that are designated with signs for cardboard, paper, wood, metal, and plastic.
- h. If items are broken, contact supply immediately to report it.
- i. DO NOT detach beds or furniture unless directed by COL Operations.
- j. Contract cleaning crews provide services on Monday, Wednesday, and Friday. Units will provide personnel to clean the shower facility and Whiskey tent they are assigned on all other days.
- k. Police call will be conducted twice daily AM/PM within assigned areas and all garbage will be disposed of immediately to prevent animals from spreading it.
- l. **POVs are not authorized in the COL;** a POV parking area is designated for unit use. Personnel assigned to the COL are authorized to park in the COL, a list will be located at ECP 2.
- m. Units will provide guards for ECP #2 on a rotating basis 24/7 during their entire training event. If more than one unit is on the ground, it is up to leadership to create a guard plan for continuous coverage.
- n. Smoking is not authorized in any structure, permanent or temporary, on the COL. Units will designate smoking areas for their personnel.
- o. Units will not tamper with the heaters or the duct work associated with the heaters.
- p. Units will not tamper with or remove Smoke/CO detectors in tents.
- q. Only utilize tents and structures issued to your organization.
- r. There are no tactical vehicles allowed in front of the Whiskey tents.
- s. The speed limit inside the COL is 5 MPH; all vehicles will be ground guided once they enter the tent area.
- t. When issued the aid station, Building 96170, it must be staffed by a **Credentialed Medical Officer, not a Medic**. If the officer is not in the building and there are no patients, the building must be secured.

## 6. Out-processing Procedures

- a. Thoroughly inspect tents before initiating supply walk through (multiple issues will terminate the inspection and require a reschedule)
- b. Sweep, Sweep, Sweep! Under bunk beds and throughout the whole tent
- c. Lift bottom mattress up for ease of inspection
- d. Remove all trash from tents

- e. Remove all personal equipment from lockers and tents before inspection.
  - f. Return all bunks and lockers to original condition
  - g. Return any extra lockers, beds, fans, tables and chairs. Note: No tents are issued with chairs
  - h. After the tent is cleared, unplug the lights and seal up both front and back doors.
- Execute thorough police call around tent

Figure I-1. Contingency Operating Location (COL) Victory Map



Figure I-2. Contingency Operating Location (COL) Victory In-processing-Checklist



**DEPARTMENT OF THE ARMY**  
**CONTINGENCY OPERATING LOCATION VICTORY**  
 BLDG 9615A, TAC 13D  
 Joint Base McGuire/Dix/Lakehurst 08640-5000

**IN-PROCESSING CHECKLIST**

**UNIT:** \_\_\_\_\_

**STATUS:** AT / TPU

**Entry Date:** \_\_\_\_\_

**Proposed Exit Date & Time:** \_\_\_\_\_

The below listed actions must be completed during unit in-processing at COL Victory and presented with unit's PERSTAT upon completion. Each item will be initialed by COL Victory representative.

	Date	Initials
<b>1. Admin</b>		
a. Admin welcome packet from Operations Cell		
b. Confirmation of welcome packet		
c. Unit received Admin In-Briefing covering the following topics:		
1. PERSTAT		
2. Alpha Roster		
3. Tent Assignments: _____ TOC: _____		
4. Sensitive Items		
5. Vehicle Manifest		
6. In-Processing / Out-Processing Checklists		
7. Hours of Operation (include all departments)		
8. Assigned Parking Areas: _____		
9. Police Call Area Assigned		
10. Admin Support		
d. Unit has provided the following documents to the Operation Cell		
1. Personnel Manifest (Due with initial PERSTAT)		
2. Vehicle Manifest (Due with initial PERSTAT)		
3. Sensitive Item Manifest (Due with initial PERSTAT)		
4. In-Processing Checklist (Due with initial PERSTAT)		
<b>2. Supply</b>		
a. Unit has provided Supply with DA Form 1687 & Assumption of Command		
b. Supply Welcome Packet		
c. Complete Supply Issue (attach copy of DA Form 2062)		
d. Assigned Aztec #: _____		
e. Appointment to Clear Scheduled: Date _____ Time _____		

\_\_\_\_\_  
 (Printed Name of Admin Rep)

\_\_\_\_\_  
 (Signature)

\_\_\_\_\_  
 (Printed Name of Unit Rep)

\_\_\_\_\_  
 (Signature)

Figure I-3. Contingency Operating Location (COL) Victory Out-processing-Checklist



**DEPARTMENT OF THE ARMY**  
**CONTINGENCY OPERATING LOCATION VICTORY**  
 BLDG 9615A, TAC 13D  
 Joint Base McGuire Dix/Lakehurst 08640-5000

**OUT-PROCESSING CHECKLIST**

**UNIT:** \_\_\_\_\_

**Entry Date:** \_\_\_\_\_

**Scheduled Departure Date:** \_\_\_\_\_ **Actual Departure Date:** \_\_\_\_\_

The areas listed below must be cleared by units prior to departing COL Victory. Each item is to be validated by COL Victory personnel when action is completed.

	YES	NO	DATE	INITIALS
1. Unit has cleared the following areas:				
Supply:				
a. Tent (cleanliness, lockers, fan)				
b. Supplies and Equipment				
c. Aztec				
d. Whiskey Tent (ACOR)				
e. Bath-House (ACOR)				
f. Police Call of Unit Areas				
g. Supply Customer Satisfaction Survey				
Admin: All documents have been turned-in				

Issues or questions contact the Mayor Cell at (609)562-8518/8520.

**THIS DOCUMENT MUST BE COMPLETED AND TURNED IN PRIOR TO UNIT DEPARTING THE COL**

\_\_\_\_\_  
 (Printed Name of Admin Rep)

\_\_\_\_\_  
 (Signature)

\_\_\_\_\_  
 (Printed Name of Unit Rep)

\_\_\_\_\_  
 (Signature)

**Appendix J**  
**US Naval Air Engineering Center, Lakehurst NJ as a Local Training Area**

**CURRENTLY UNDER REVISION**

## **Appendix K**

### **Operational Risk Management (ORM)**

**K-1. Risk management** is the application of systematic thinking to the problem of making operations safer and more effective. It is a systems-based concept especially effective in dealing with complex, high-risk problems. Risk management is also applicable to training missions, which are often both complex and high risk, and can improve realism and cut down on training accidents. Risk assessments will be on hand at all training sites and integrated into the safety briefing, they will be made available to the Range Safety Officer or Range Control Representative when requested.

**K-2. Risk management is a five-step process** of identifying, assessing and controlling hazards to conserve combat power and resources. The five steps are:

a. **Identify the Hazard:** The process begins with the identification of hazards with the potential of causing injury to personnel, damage to equipment or structures, loss of material or reduction of your ability to perform a prescribed function.

b. **Assess the Hazard:** Here the objective is to determine the potential impact of a hazard on the training or operational mission. There are two major considerations.

(1) **Probability** - How likely is the hazard to cause loss?

(2) **Severity** – If the hazard does cause a loss, how severe will that loss be?

c. **Risk Control Options and Decisions:** The third step is to create as many risk control options as possible and then select those that best control risks without significantly impeding the training or operation mission objectives. Risk decisions should be made at the appropriate command level. As a guide, the Commander responsible for executing the training or operation mission is authorized to make decisions. The Commander is to refer any risk they do not feel comfortable making to the next level in the chain of command for a decision.

d. **Risk Control Implementation:** The fourth step involves the integration of risk controls into standard operating procedures, operational plans, operational directives, lesson plans, training directives or instructions. The implementation of risk controls must be effectively communicated to all personnel; especially those responsible for implementing the controls.

e. **Supervision and Evaluation:** The final step of effective supervision ensures sustained effectiveness of risk controls. Commanders have responsibility to supervise and enforce performance to standard. They should also provide feedback on the effectiveness of risk controls. Individuals are expected to have self-discipline and execute the risk controls selected by their commanders.

**K-3. When conducting risk assessments,** we can use the risk assessment worksheet/record (RAWR) an example is shown in Appendix D. The completed RAWR should be maintained to facilitate implementation of control measures, conduct of safety briefings and preparation of units for future training and mission analysis.

**K-4. In analyzing the training event or mission** identify all possible hazards associated with all phases of the operation from beginning to end. If you identify all



possible hazards you can plan for those hazards and take steps to avoid or mitigate the damage caused by them.

**K-5. Determining the level of risk requires** good judgment and is dependent on the use of historical data, lessons learned, intuitive analysis and experience. Uncertainty can arise in the assessment of both the probability and severity of a hazardous incident. This could be attributed to inaccurate or incomplete information, contradictory or unforeseen circumstances. Using the table in Figure 4-1 will allow quantifying the level of risk and assign a severity to the risk.

**Figure K-1: Risk Assessment Matrix**

RISK ASSESSMENT MATRIX							
Read right and up			Probability an Incident will Occur				
			Frequent	Likely	Occasional	Seldom	Unlikely
			A	B	C	D	E
SEVERITY EFFECTS	Catastrophic	I	EH	EH	H	H	M
	Critical	II	EH	H	H	M	L
	Moderate	III	H	M	M	L	L
	Negligible	IV	M	L	L	L	L
EH - Extremely High Risk H – High Risk M – Moderate Risk L- Low Risk							

**K-6. For each hazard that is analyzed** (by determining the probability and severity of the hazard) a risk value or Risk Assessment Code (RAC) is assigned. The RAC i.e., Extremely High, High, Medium, and Low is explained in Figure 4-2.

**Figure K-2: Risk Value**

<b>RAC</b>	<b>DEFINITION</b>
<b>Extremely High</b>	Loss of ability to accomplish mission if hazards occur during mission. A <i>frequent</i> or <i>likely</i> probability of <i>catastrophic</i> loss or <i>frequent</i> probability of <i>critical</i> loss exists.
<b>High Risk</b>	Significantly degrades mission capabilities in terms of required mission standards, inability to accomplish all parts of the mission, or inability to complete the mission to standards if hazards occur during the mission. <i>Occasional</i> to <i>seldom</i> probability of <i>catastrophic</i> loss exists. A <i>Likely</i> to <i>Occasional</i> probability exists of a <i>critical</i> loss occurring. <i>Frequent</i> probability of <i>moderate</i> loss exists.
<b>Moderate Risk</b>	Degrades mission capabilities in terms of required mission standards. An <i>Unlikely</i> probability of <i>catastrophic</i> loss exists. The probability of a <i>critical</i> loss is <i>seldom</i> . <i>Moderate</i> losses occur with a <i>Likely</i> or <i>Occasional</i> probability A <i>frequent</i> probability of <i>negligible</i> loss exists.

<b>Low Risk</b>	Little or no impact on mission accomplishment. The probability of critical loss is <i>unlikely</i> , moderate loss is <i>seldom</i> or <i>unlikely</i> . The probability of <i>negligible</i> loss is <i>likely</i> or <i>less</i> . Losses have no impact on mission.
-----------------	--

**K-7. The third step in the risk management process** is to develop control options to eliminate the hazard or reduce the risk of occurrence. This is accomplished in two sub-steps; develop control options and make risk decisions:

a. Control options are developed to either eliminate the hazards or reduce the risks. Hazards that cannot be eliminated must be controlled. When developing control options, consider the reason for the hazard and not just the hazard itself.

b. Controls can be taken in three forms.

(1) Educational Controls: These controls are based on the knowledge and skills of the units and individuals. Effective control is implemented through individual, collective and continuous training that ensures currency and performance to standard.

(2) Physical Controls: These controls may take the form of barriers, guards or signs to warn individuals and units that a hazard exists. In addition, safety controllers to control specific hazards may be appointed, i.e., Assistant Instructors for conduct of live fire ranges.

(3) Avoidance Controls: These controls are applied to prevent personnel from contacting identified hazards or getting into hazardous situations where other controls are not practical or effective.

**K-8. For the controls to be effective** they must meet the following criteria:

a. Suitability: the control must remove the hazard or reduce (mitigate) the residual risk to an acceptable level.

b. Feasibility: the individual or unit must be able to implement the control

c. Acceptability: the benefit gained by implementing the control must justify the cost in resources and time. The assessment of acceptability is largely subjective; use the following criteria to aid in assessing acceptability:

Support	Availability of adequate personnel, equipment, supplies, and facilities to implement suitable controls.
Standards	Guidance and procedures for implementing controls are clear, practical, and specific.
Training	Knowledge and skills are adequate to implement a control.
Leadership	Leaders are competent to implement a control.
Individual	Individual soldiers are sufficiently self-disciplined to implement a control.

**K-9. In developing control options**, Commanders must determine the residual risk associated with each hazard and the overall residual risk for the mission or task:

a. Residual risk is the risk remaining after controls have been selected and implemented. Residual risk is valid only if the controls for it are implemented and

effective. As controls are identified and applied, the hazards will be reassessed as in step 2 of the ORM process, and the level is then readjusted to the new level of risk. This process is repeated until the level of residual risk is acceptable to the Commander or cannot be further reduced.

b. Overall residual risk of a mission or task will be determined when more than one hazard is identified. The residual risk for each of the hazards may have a different level or risk depending on the assessed probability and severity of the hazardous incident. The overall residual risk of the mission or task is determined based on the incident having the greatest residual risk and not by averaging the risk of all hazards. If one hazard RAC is high and the rest are moderate, then the overall risk is high.




**K-10. In making control decisions**, the options selected to eliminate the hazard or reduce the risks must take into consideration the task or mission requirements. The key consideration in making risk decisions is to determine if the risk is justified. Commanders must compare and balance the risk against the mission or task expectations. The Commander alone decides if controls are sufficient and acceptable and whether to accept the residual risk. If the risk level is too high, the Commander could direct additional control measures be implemented, modify controls, or reject the task or mission as unacceptable.

**K-11. The Bottom line** is leaders are responsible for the levels of risk in the training they plan. They are responsible for planning and mitigation of risks to allow for safety to all personnel involved in a mission or training exercise. Only through risk management during the planning process will units be successful in providing a safe training environment.

**K-12. Procedures for conducting Risk Management are contained in ATP 5-19;** DD Form 2977 contained in Figure K-1 is the army standard, but service specific formats are acceptable.

Figure K-3

DELIBERATE RISK ASSESSMENT WORKSHEET						
1. MISSION/TASK DESCRIPTION AND EXECUTION DATE(S)					2. DATE PREPARED	
3. PREPARED BY						
a. NAME (Last, First, Middle Initial)			b. RANK/GRADE		c. DUTY TITLE/POSITION	
d. UNIT		e. WORK EMAIL			f. TELEPHONE (DSN, Commercial (Include Area Code))	
g. UIC/CIN (as required)		h. TRAINING SUPPORT/LESSON PLAN OR OPORD (as required)			i. SIGNATURE OF PREPARER	
Five steps of Risk Management: (1) Identify the hazards (2) Assess the hazards (3) Develop controls & makes decisions (4) Implement controls (5) Supervise and evaluate (Step numbers not equal to numbered items on form)						
	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
<div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center;">+</div> <div style="border: 1px solid black; padding: 2px; width: 20px; text-align: center;">-</div>					How:	
					Who:	
10. OVERALL RESIDUAL RISK LEVEL (All controls implemented):						
<input type="checkbox"/> EXTREMELY HIGH <input type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW						
11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION						
12. APPROVAL OR DISAPPROVAL OF MISSION OR TASK						
<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE						
a. NAME (Last, First, Middle Initial)		b. RANK/GRADE		c. DUTY TITLE/POSITION		d. SIGNATURE OF APPROVAL AUTHORITY
e. ADDITIONAL GUIDANCE:						

RISK ASSESSMENT MATRIX		Probability (Expected frequency)				
		Frequent: Continuous, regular, or inevitable occurrences	Likely: Several or numerous occurrences	Occasional: Sporadic or intermittent occurrences	Seldom: Infrequent occurrences	Unlikely: Possible occurrences but improbable
Severity (expected consequence)		A	B	C	D	E
Catastrophic: Mission failure, unit readiness eliminated; death, unacceptable loss or damage	I	EH	EH	H	H	M
Critical: Significantly degraded unit readiness or mission capability; severe injury, illness, loss or damage	II	EH	H	H	M	L
Moderate: Somewhat degraded unit readiness or mission capability; minor injury, illness, loss, or damage	III	H	M	M	L	L
Negligible: Little or no impact to unit readiness or mission capability; minimal injury, loss, or damage	IV	M	L	L	L	L
LEGEND: EH - Extremely High Risk H - High Risk M - Medium Risk L - Low Risk						
13. RISK ASSESSMENT REVIEW (Required when assessment applies to ongoing operations or activities)						
a. DATE	b. LAST NAME	c. RANK/GRADE	d. DUTY TITLE/POSITION	e. SIGNATURE OF REVIEWER		
						
						
						
14. FEEDBACK AND LESSONS LEARNED						
15. ADDITIONAL COMMENTS OR REMARKS						

## Instructions for Completing DD Form 2977, "Deliberate Risk Assessment Worksheet"

### 1. Mission/Task Description and Execution

**Date(s):** Briefly describe the overall Mission or Task and execution date(s) for which the deliberate risk assessment is being conducted.

**2. Date Prepared:** Enter date form was prepared.

**3. Prepared By:** Information provided by the individual conducting the deliberate risk assessment for the operation or training.

**Legend:** **UIC** = Unit Identification Code; **CIN** = Course ID Number; **OPORD** = operation order; **DSN** = defense switched network; **COMM** = commercial

**4. Subtask/SubStep of Mission/Task:** Briefly describe all subtasks or substeps that warrant risk management.

**5. Hazard:** Specify hazards related to the subtask in block 4.

**6. Initial Risk Level:** Determine initial risk level. Using the risk assessment matrix (preceding block 13), determine level of risk for each hazard specified. Use probability and severity to determine risk level; enter risk level into column.

**7. Control:** Enter risk mitigation resources/controls identified to abate or reduce risk relevant to the hazard identified in block 5.

**8. How to Implement / Who Will Implement:** Briefly describe the means of employment for each control (i.e., OPOrd, briefing, rehearsal) and the name of the individual, unit or office that has primary responsibility for control implementation.

**9. Residual Risk Level:** After controls are implemented, determine resulting probability, severity, and residual risk level.

**10. Overall Risk After Controls are Implemented:** Assign an overall residual risk level. This is equal to or greater than the highest residual risk level (from block 9).

### 11. Supervision Plan and Recommended Course of Action

Completed by preparer. Identify specific tasks and levels of responsibility for supervisory personnel and provide the decision authority with a recommend course of action for approval or disapproval based upon the overall risk assessment.

**12. Approval/Disapproval of Mission/Task:** Risk approval authority approves or disapproves the mission or task based on the overall risk assessment, including controls, residual risk level, and supervision plan.

**13. Risk Assessment Review:** Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission or activity and controls to provide valid input on changes or adjustments needed. If the residual risk rises above the level already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.

**14. Feedback and Lessons Learned:** Provide specific input on the effectiveness of risk controls and their contribution to mission success or failure. Include recommendations for new or revised controls, practicable solutions, or alternate actions. Submit and brief valid lessons learned as necessary to persons affected.

**15. Additional Comments or Remarks:** Preparer or approval authority provides any additional comments, remarks, or information to support the integration of risk management.

**Additional Guidance:** Blocks 4-9 may be reproduced as necessary for processing of all subtasks/substeps of the mission/task. The addition and subtraction buttons are designed to enable users to accomplish this task.



## Appendix L

### Training Accidents/Incidents

#### L-1. General

a. This appendix addresses the areas of ammunition, weapon malfunctions, personnel injuries and illnesses, fires, erratic round procedures, environmental spills and radiation. Some incidents may contain one or more of these elements. Units will contact range control in the event of an accident/incident in the training area, **DO NOT CALL 911**, call the Range Control Fire Desk (609) 562-4600. Procedures are established, and all emergency assets required for response are dispatched through the firing desk.

b. After contacting Range Control and making a verbal report, units are required to complete an USASAFD Form 2253-R, USASA DIX RANGE ACCIDENT/INCIDENT REPORT, and turn it into the Range Safety Office immediately, but not later than 0800 hrs the day following the incident, See Figure L-1.

c. Reporting an accident/incident to range control merely informs the installation of the event. Units are required to complete service specific accident reports and submit through their chain of command to the appropriate reporting agencies. Army units complete DA Form 285-AB-R, Army Abbreviated Ground Accident Report. ASA Dix requires all units furnish a copy of all reports and final action documents to:

COMMANDER USASA FORT DIX  
ATTN: RANGE SAFETY OFFICE  
BLDG 9013 RANGE ROAD  
JB MDL 08640-5000

#### L-2. Ammunition and Weapons Malfunctions

a. When malfunctions or accidents involving weapons or ammunitions occur the OIC will:

- (1) Place the range in a cease fire status
- (2) Report the incident to Range Control
  - (a) Location
  - (b) What happened?
- (3) Preserve the scene
  - (a) Weapons are rendered safe without tampering
  - (b) Ammunition is rendered safe without tampering
  - (c) Weapons and equipment remain as is
  - (d) Personnel are kept clear of the scene
- (4) Request Medical Support (if necessary)

**INJURED PERSONNEL SHOULD NOT BE MOVED, UNLESS TO AVOID FURTHER INJURY, UNTIL RANGE MEDICAL PERSONNEL ARRIVE.**

(5) Complete and turn-in USASAFD Form 2253-R and prepare DA Form 285-AB-R for unit chain of command, Complete DA Form 4379 Ammunition Malfunction Report.

b. All personnel who witnessed the event, if not injured, remain in place until USASA Fort Dix Range Safety personnel arrive; these include but are not limited to the OIC and RSO.

### **L-3. Personnel Injuries & Illness**

a. When an accident involving personnel injury occurs in the Training Complex the OIC will:

- (1) Report the following:
  - (a) Location
  - (b) Name and contact number of person reporting
  - (c) Number of personnel injured
  - (d) Extent of injuries
  - (e) First aid measures rendered

**INJURED PERSONNEL SHOULD NOT BE MOVED, UNLESS TO AVOID FURTHER INJURY, UNTIL RANGE MEDICAL PERSONNEL ARRIVE.**

(2) Complete and turn-in USASAFD Form 2253-R and prepare DA Form 285-AB-R for unit chain of command

b. Depending on the nature of the incident preserve the site and keep witnesses present until safety personnel arrive.

### **L-4. Fires**

a. When fires start in the Training Complex, the OIC will report the fire to Range Control **Immediately**. Report the following information:

- (1) Location
- (2) Extent of Fire
- (3) Actions taken by unit

b. If on a weapons range unit may continue to fire, if the fire is down range in the impact area, until the fire department arrives on site; at which time unit will immediately go to a cease fire

c. Complete and turn in USASAFD Form 2253-R when requested by Range Control Safety Office.

### **L-5. Erratic Round Procedures**

a. Erratic rounds landing outside of the Impact Areas are defined as any projectile that lands outside of the safety limits of the firing unit. Erratic rounds are normally associated with artillery/mortars but can occur with any weapon system.

b. Anyone observing an erratic round must report the incident to Range Control with the following information:

- (1) Name, rank, and unit of person reporting
- (2) Location of the observer
- (3) Injury to personnel or damage to equipment if any
- (4) Date Time the erratic round was observed
- (5) Number of rounds observed
- (6) If artillery/mortars:
  - (a) Location of burst
  - (b) Whether the burst was air or ground
  - (c) Height of burst if air
- (7) Origin of erratic round if known

c. After receiving an erratic round report, Range Control will announce; **CEASE FIRE FREEZE, CEASE FIRE FREEZE, THIS IS FORT DIX RANGE CONTROL CEASE**

**FIRE FREEZE!** All units will acknowledge the call with the firing facility number and the initials of the Radio Telephone Operator (RTO) receiving the call.

d. All units immediately come to a cease fire and clear all weapons and move to the rear of the weapons leaving them in place with all current firing data intact.

Artillery/Mortars will report any rounds in hot tubes to Range Control which will determine what actions the unit must take.

e. Range Control will then allow selected ranges to resume firing based on the erratic round report.

f. All Fire Direction Centers (FDC) prepare to send the following information when requested by Range Control:

- (1) Time of last round fired
- (2) Azimuth of fire
- (3) Deflection fired
- (4) Charge Used
- (5) Caliber and type of weapon fired
- (6) Type of fuse fired
- (7) Time set on time fuses
- (8) Target location

g. Range Control will lift the cease fire once the cause, location and unit responsible for the erratic round is determined (except for the responsible unit).

h. The Battalion Commander of the responsible unit will conduct a Command Inquiry or an investigation IAW AR 15-6 with the results submitted to the Range Safety Officer, Range Control Officer, Chief of TD, and the Director of DPTMS to determine appropriate actions. The unit will not be authorized to conduct firing until the investigation is completed.

## **L-6. Environmental Spills**

a. Units must report the following information to Range Control of environmental spills of any size:

- (1) Location of the spill
- (2) Type of spill
- (3) Injuries to personnel or damage to equipment
- (4) Steps the unit is taking to contain the spill

b. Range Control will notify the Fire Department who will dispatch the hazardous materials containment unit to determine the extent of spill and necessary immediate mitigation measures; the units will clean up the spill IAW direction from JB MDL Environmental Office.

c. Units are required to obtain spill kits and bring them with them for their training.

d. Units will remain occupied at the site and will not clear the facility until the Environmental Office determines the cleanup to be complete and the area inspected by Range Control.

e. Should clean up require the services of a commercial contractor units may be required to reimburse the installation.

f. Complete and turn in USASAFD Form 2253-R to the Range Control Safety Office.

**L-7. Radiation**

a. Units will have a list with Nomenclature and Serial Number, Material Safety Data Sheets (MSDS), and Technical Manuals for all equipment with radioactive material while training at ASA Fort Dix and copies will be provided to Range Control when requested.

b. Should an incident occur where the equipment is damaged, the procedures in Paragraph L-6 will be followed.

**USASA DIX RANGE ACCIDENT / INCIDENT REPORT**  
**Print Legibly and Turn-In to the Firing Desk at the End of Training Day**

DESCRIBE HOW AND WHERE THE MISHAP OCCURRED (Provide a concise description of the mishap: Include Who, What, When, Where, Why and How; Include the Unit, Rank and Name of Everyone Injured)

[illegible]

265

## **Appendix M Ammunition**

### **M-1. General**

- a. Ammunition and Explosives will only be used IAW specific TM, Range, and Ammunition Information Notice (AIN) procedures. Improper use can be defined as any actions that are not detailed in official publications to include modification/tampering, using incorrect ammunition/weapons, using improper methods, and using A&E for other than its intended purpose.
- b. Alteration or modification of ammunition is not authorized. This includes de-linking belted ball/tracer ammunition to remove tracers, taping grenades, bending safety levers (spoons), removing, and dumping powder from grenade fuses, and removing caps/igniters from demo kits.
- c. Commercially purchased ammunition is prohibited from use in government weapons. Government procured ammunition is prohibited from use in privately owned weapons. Certain types of ammunition may be the correct caliber, but not authorized for use such as delinked ammo or linked ammo for specific weapon systems.
- d. Ammunition lot integrity must be maintained at all times.
- e. There is no smoking within 50 feet of ammunition.
- f. Unused ammunition will be returned to the ASP IAW applicable turn-in procedures discarding ammunition or using amnesty turn-in points in lieu of proper accountability and turn-in procedures is not authorized.

### **M-2. Ammunition Restrictions**

- a. Units will comply with restrictions IAW specific TMs, Ranges, and Notice of Ammunition Reclassification (NAR) guidance.
  - b. Phosphorous ammunition is prohibited from use on ASA Fort Dix.
  - c. Improved Conventional Munitions (ICM) are prohibited on ASA Fort Dix.
  - d. Blank and ball ammunition will not be stored on the same pallet or issued from the same location at the same time on ranges.
  - e. Blank ammunition will not be fired at personnel closer than 10 meters for 5.56 mm and 7.62 mm weapons systems, and no closer than 20 meters for .50 cal weapons.
- Ammunition must be inspected by the RSO to ensure that blank ammunition and ball ammunition are not mixed.**
- f. Blank ammunition will not be fired without a blank adapter on the weapon.
  - g. Aerial flares and other pyrotechnics are not authorized to be used in certain areas of the installation due to fire hazard and flight patterns. Check Appendix E for specific information on flare and pyrotechnic use.
  - h. The use of Ultimate Training Munitions (UTM), Close Combat Mission Capability Kit (CCMCK), simunitions, or other marking/wax round is authorized for force-on-force training IAW the following procedures:
    - (1) All skin will be covered
    - (2) Individual Body Armor with Combat Helmet will be worn
    - (3) Full eye, face, and neck protection will be worn
    - (4) OIC & RSO will inspect all ammunition to ensure live ammunition is not inter-mixed with the simunitions being used.



(5) Measures will be implemented by the using unit to ensure non-participating units and personnel remain clear to a minimum of 150 meters from the training being conducted.

(6) Risk assessments addressing all measures listed will be in written format and included during mandatory range safety briefing prior to any training. The risk assessment will be reviewed by the ASA Fort Dix Range Safety Office prior to the conduct of training.

(7) The measures are minimum standards, and each munition may carry more restrictive safety measures that will be followed in planning force on force training.

g. Paintball is only authorized on Range 14 (MWR); paintball will not be incorporated into training events on any other training facility on ASA Fort Dix without ASA Range Officer approval.

### **M-3. Transportation of Arms, Ammunition, and Explosives (AA&E)**

a. Military and DA/DoD vehicles transporting A&E must have two ammunition certified drivers when operating outside of Installation controlled boundaries. A road is considered controlled by the Services/Agencies if access to the road is restricted at all times through the use of gates and guards.

b. Figure M-1 details driver credentials. Contact ASP Surveillance for references.

Figure M-1

Credential	Military		Civilian	Contractor
	AirForce/Army	Marines/Navy		
Employee Identification Card (CAC or Commercial)	YES	YES	YES	YES
State (Any) Drivers License	YES	YES	NO	NO
CLASS A, B, or C CDL	NO	NO	YES	YES
State (Any) Drivers License w/HAZMAT Endorsement	NO	NO	YES	YES
Military License with Vehicle (OF-346, DA 5984, or other Service Form)	YES	YES	YES	NO
HAZMAT or AMMO Endorsement on Military License	YES	YES	YES	NO
Medical Examiner's Certification	NO	YES	YES	YES
Certification of Explosives HCD 1.1, 1.2, or 1.3 Safety Training (A&E Training Cards)	YES	YES	YES	YES

c. A&E cannot be transported outside of approved shipping and storage containers. Ammunition must be repacked to an as-issued configuration prior to movement. Packaging and packing materials will be the responsibility of the units. Additional packaging and packing material may be requested from the ASP. A&E with lost or destroyed inner packaging will, at a minimum, be transported in wood or metal boxes lined on all sides, including bottom and cover, with cardboard IAW approved special packing instructions. Packages must include lids or covers allowing for positive restraint of contents. Container lids must be secured to prevent pilferage/accidental release of contents. Any packing tape can be used to secure cardboard outer packs. Wooden boxes that are not securable by wires or hinges with hasps will be nailed shut.

d. A&E will not be carried in the passenger compartment of vehicles. This does not apply to operational loads for law enforcement or EOD vehicles when on mission. Munitions will not be transported in passenger-type vehicles except for limited quantities IAW DA Pam 385-64 and 49 CFR 177.870 subpart E. Personnel will not ride in the cargo area of vehicles transporting A&E.

e. Cargo space will be clean and free from exposed bolts, nuts, screws, nails, or inwardly projecting parts that could damage the lading. Check floor to ensure that it is tight and free from holes. Floor shall not be covered with oil or other hazardous substances.

f. Total weight of load cannot exceed rated capacity of vehicle. Weight should be distributed to minimize impact on vehicle performance.

g. Items loaded must be compatible as defined by 49 CFR 177.848 subpart C. Trailers are considered separate vehicles and do not need to be compatible with the vehicle towing them. Compatibility extends to all HAZMAT, not just munitions. Most lubricants, oils, paints, or fuels are considered hazard class 3.

h. Other materials to include residue must be clearly segregated and secured from ammunition to prevent damage or mixing. Unserviceable ammunition must be clearly marked and separated from serviceable ammunition. Blank ammunition must be kept separate from service (ball/tracer) ammunition.

i. A&E will be blocked/braced or secured with suitable tie-down straps to prevent movement IAW load drawings. Contact ASP Surveillance for load drawings. Only approved ratchet straps will be used. Ratchet straps without an NSN (i.e., 1670-00-725-1437 or 5340-00-980-9277) must be certified by an accredited agency (i.e., UL, ANSI) with a stamp or tag showing weight capacity. Manufacturer ratings do not comply.

j. Vehicles transporting A&E will be fueled and inspected for satisfactory condition prior to loading. A DD Form 626 is required prior to any movement of HAZMAT (Motor Vehicle Inspection [Transporting Hazardous Material]). At the time of issue, the DD Form 626 will have the origin blocks completed by ASP personnel. Units must retain this DD Form 626 for use on ammunition turn-in, DD Forms 626 are non-transferrable. Units that need to transport ammunition in a vehicle that was not inspected at the time of issue must request an ASP representative inspection at the first opportunity.

k. Government-owned/operated/leased vehicles transporting A&E will be equipped with two 10-BC fire extinguishers. Extinguishers are required for access to the ASP, even if transporting residue only. An example NSN for an authorized extinguisher is NSN 4210-00-775-0127. Water fire extinguishers are not authorized for ammunition with HC or TH3 CM components. Fire extinguishers must be serviceable with all components and a charge indicator reading green.

l. Each vehicle must have three emergency warning triangles.

m. Each A&E laden vehicle and trailer must be placarded on all 4 sides for the greatest hazard being transported, to include small arms. A vehicle carrying both 1.4 and 1.2 would be placarded 1.2. It is the transporting organization's responsibility to provide correct placards.

n. Each vehicle must have a copy of 49 CFR Part 397, the applicable Emergency Response Guide, and a DD Form 2890, DoD Multimodal Dangerous Goods Declaration. These can be provided by the ASP.

o. Munitions that are not transported in a covered or enclosed vehicle must be covered with a water- and fire-resistant tarp. Covers and tarps must be without tears or holes. Commercially purchased tarps must have a third-party tag certifying water and fire resistance. Covered vehicles that do not prevent water from their beds must have their ammunition palletized. Tarps will be secured by ropes or tie-downs. Units must use additional tarps if vehicle covers do not completely protect A&E from weather or direct exposure to sunlight.

p. Security for transportation of ammunition will be IAW AR 190-11, DoD 4500.9-R, and DoD 5100.76-M. Categories I and II AA&E will be placed in the custody of a commissioned officer, warrant officer, NCO (E-5 and above), DoD civilian (GS-5 and above), or DoD contractor employee in a similarly responsive position. All movements of category I and II AA&E require an armed guard with a minimum of 10 rounds regardless of the force protection condition (FPCON). Category III and IV AA&E will be under the continuous positive control of designated, responsible personnel. Vehicles carrying A&E are prohibited from housing, Base Exchange, Commissary, or anywhere else not specific to ammunition operations.

q. All armed guards will have a use of force briefing from their BN S-2 prior to conducting ammunition guard.

#### **M-4. Storage and Handling of AA&E**

a. Handling and storage of ammunition is conducted IAW AR 190-11, AR 385-63, DA Pam 385-64, this pamphlet, and the appropriate FM/TM for each weapon.

b. There are no consolidated ammunition holding areas in the ASA Fort Dix Range Complex; ammunition is issued for field storage and use to the using unit. Ammunition will be transported to the facility scheduled for use and remain there until ready for return to the ASP. No A&E is authorized in the cantonment areas unless approved by Installation Safety and the Directorate of Security in writing.

c. Ammunition will not be left unattended at any time; ammunition will be guarded IAW AR 190-11. An armed guard force, if required by AR190-11, will be qualified with their weapons within the last twelve months and briefed by their BN S-2 on the authorized use of deadly force. The guard force will be led by an Officer/NCO with current ASA Fort Dix range safety certification and always provide security for ammunition until the ammunition is returned to the ASP.

d. Vehicle and storage locations for A&E will be 75 feet from bivouac; sleeping, eating and administrative areas unless quantity distance (QD) requires more distance (DA Pam 385-64) or contact Quality Assurance Specialist Ammunition Surveillance (QASAS) at 562-5822 for further guidance.

e. Ammunition stored in field locations will be stored on dunnage at least six inches above the ground (pallets). Fire-retardant tarpaulins will be used to protect the ammunition from rain, sleet, hail, snow, and the direct rays of the sun. To provide ventilation, the tarps will be raised 18 inches from stacks and not contact the boxes. It is permissible and recommended to store ammunition on the vehicles that transported the ammunition from the ASP because they meet the safety requirements of (DD Form 626).

f. At least two (2) 10: BC or greater fire extinguishers with a minimum combined rating of 4A:20: BC must be readily available when handling or storing ammunition. The

fire extinguishers will be attached to the exterior of vehicles containing A&E or stored a minimum of 50 feet from palletized A&E. Water will not be utilized to fight a fire involving Group D chemical ammunition containing (HC, TH; PT; TEA, TPA).

g. DA Pamphlet 385-64 requires that buildings and shelters containing A&E be plainly marked with the symbol number of the most hazardous material contained there. This requirement applies to ammunition stacks and shelters on ranges.

h. A list of all ammunition on site will be maintained and reported to Range Control when occupying a facility to guard ammunition.

i. Limit unpacking ammunition at the firing line to the least number of rounds that permits efficient firing of the exercise. Do not break seals or prematurely open containers. Unused munitions must be returned to standard pack for turn-in; unnecessarily opening boxes exposes ammunition to degradation and complicates required investigations and turn-in process time. Ammunition is issued to firing personnel immediately before conducting firing exercises.

j. All ammunition is to remain outside of back blast areas and all safety danger zones on ammunition vehicles or in ammunition shed (with firefighting sign) on ranges so equipped. All ammunition in the ASA Fort Dix range and training area will be guarded.

k. Misfired ammunition will be packaged in separate containers and marked as misfired and identified to ASP personnel at turn-in. Weapon misfires are a unit's responsibility to clear. After performing all misfire procedures, if the unit is still unable to clear the weapon, contact Range Control and request assistance. DOL weapons maintenance shop will dispatch personnel in support.

l. Units will not be cleared from range and training facilities until a police call is conducted to clean-up all ammunition residue and that residue is properly disposed. Proper ammunition accountability procedures will be strictly enforced. The ASP will provide units with a list of turn-in requirements for the ammunition they draw. All material obtained from the ASP must be returned to the ASP, this includes pallets, cans, boxes, banding material, brass, links, expended smoke grenade bodies, packaging material, and live unexpended ammunition. IF YOU GOT IT AT THE ASP, TAKE IT BACK TO THE ASP.

m. All OIC/RSO personnel will be knowledgeable of the condition of ammunition utilized on their ranges ensuring UXOs are not transported to the ASP but are reported to Range Control for investigation by EOD.

n. Unused ammunition will be returned to the ASP IAW applicable turn-in procedures. Materials must be clean and dry for turn-in. Discarding ammunition or using amnesty turn-in points in lieu of proper accountability and turn-in procedures is not authorized.

#### **M-5. Ammunition Malfunctions**

a. A malfunction is a failure of an ammunition item to function as expected when fired or launched and explosive items that fail to function.

b. In the event of an ammunition malfunction, any event where ammunition fails to function as designed, and after published misfire procedures are performed, units will notify Range Control immediately. The following information will be reported at a minimum:

- 1) Location
- 2) Ammunition DODIC
- 3) Weapon system involved
- 4) Time of malfunction
- 5) Unit designation

c. When misfire procedures do not resolve the situation, ensure the weapon is pointed down range, attempt to place the weapon on safe, and have all personnel return to a safe area.

d. Complete a DA Form 4379, Ammunition Malfunction Report, and turn the report into the Range Control Safety Office and the ASP during turn-in. Ensure the report is complete and the contact information for the individual completing the report is included.

e. The Range Safety Officer, DOL weapons maintenance, the ASA Fort Dix ASP QASAS, and EOD will be informed (as necessary) of the incident and dispatched to the range to investigate and resolve the situation.

#### **M-6. Amnesty Program Procedures**

a. The amnesty program is designed to assist Soldiers who inadvertently find additional ammunition to return that ammunition to Army control. The program is not a substitute for standard turn-in procedures. The amnesty program is for small caliber ammunition 50 cal. and below using a drop box, where no questions will be asked. All other found items will be reported to Range Control. The 87 EOD will be notified to investigate and recover all found ordnance.

b. Red Ammunition Amnesty boxes resembling mailboxes are located at the Administration Building 96168 on COL Victory and at the ASP Road Inbound Vehicle Storage yard.

## **Appendix N**

### **Safety and Weather Precautions**

#### **N-1. General**

This appendix addresses various natural hazards, weather, and other safety issues that must be considered in both field and garrison operations. If a hazardous situation arises while conducting operations at ASA Dix ranges or training areas, take appropriate precautions and report it to Range Control immediately. While in the cantonment area, report incidents to 87th Security Forces Squadron (87 SFS).

#### **N-2. Severe Weather**

Range Control is the primary source for weather warnings while units are in the ASA Dix training area. Severe weather warnings are issued over the command Radio NETS, Motorola Radio Channel 1, and FM 34.30 new squelch on, as they occur to minimize disruption of operations and danger to personnel and equipment. This includes hurricanes, tornadoes, thunderstorms, large hail, heavy winds (or gusts), heavy rainfall, freezing precipitation or sleet, heavy snowfall, and electrical storms. Personnel must ensure equipment, flammables, operational areas, and vehicles are secured or sheltered to minimize damage; be prepared to respond to injuries, equipment damage, fires, etc. Additional agencies that may be involved are the Joint Base Weather Office, Emergency Operations Center (EOC), and 87 SFS.

#### **N-3. Command and Control**

A unit's chain of command always maintains command and control of their assets and will retain the decision authority to continue training or cancel due to inclement weather. Only in extreme emergencies will the decision to evacuate the training areas be ordered by the ASA Commander or JB MDL Commander.

#### **N-4. Evacuation of Training Areas**

Range Control will notify units when and where to evacuate based upon projected severity of storms, i.e., hurricanes, tornadoes, or projected heavy snowstorms. Range Control will assign structures in the training area or billeting on cantonment for those units without facilities previously assigned to them. Training Division will coordinate bus movement for those units without organic transportation assets.

#### **N-5. Safety Areas Addressed in the Following Tables**

- N-1. Wildlife/Insects
- N-2. Heat Casualty Prevention
- N-3. Cold Weather Injury Prevention
- N-4. Adverse Weather Lightning/Tornados/Hurricanes
- N-5. Snowstorm Precautions
- N-6. Field Heaters and Carbon Monoxide Exposure



## **Table N-1. Wildlife/Insects**

### **N-1-1. Ticks**

#### **a. To avoid Ticks:**

- (1) Wear clothing in a protective manner, to include long sleeve shirts and trousers tucked into socks.
  - (2) Avoid grassy and bushy areas, when possible, particularly the outer edges of each.
  - (3) Inspect body and clothing frequently; shower as soon as possible after being in a suspected tick habitat.
  - (4) Effective repellents are Permanone repellent for clothing (NSN 6840-01-278-1336) and DEET for personal application (NSN 6840-00-753-4963).
- b. If a tick is found on the body or clothing, remove by using tweezers and being careful not to crush the tick on the skin; do not attempt to remove the tick by using fluids, grease, or fire.

### **N-1-2. Snakes**

a. The most common snakes found on the range complex are rattlesnakes and pine snakes. The areas in which snakes are generally found in hot weather are cool, damp places such as rotten logs, creek banks, and under rocks. In training areas, they are commonly found in foxholes and bunkers; inspect training areas closely prior to conducting operations.

#### **b. To avoid snake bites:**

- (1) Walk carefully; watch your step and where you sit.
- (2) Be careful where you place your hands when climbing or lifting objects from the ground.
- (3) Never provoke or pick-up a snake; even bites of non-poisonous snakes may cause infection requiring medical treatment.
- (4) Avoid sudden motion when placing your hands or feet near an area which may conceal a snake; beware of shady areas.

#### **c. If bitten by a snake:**

- (1) Try to kill the snake without destroying the head and take it with the patient to the medical treatment facility for identification.
- (2) Place a constricting band snugly above the bite, if swollen move the band above the bite between the heart and bite.
- (3) Contact Range Control and request medical evacuation.

### **N-1-3. Insect Bites**

#### **a. Prevention of spider and insect bites:**

- (1) Check bedding before using.
- (2) Check clothing, socks, and shoes before wearing; many Soldiers have been stung as they put on their shoes in the morning.
- (3) Avoid sleeping or leaving clothes near damp places; dampness tends to attract insects.
- (4) If you feel an insect or spider crawling remain still; sudden movement may cause it to sting you.

- (5) Never step in the shade of a bush without visually checking the spot.
- (6) Food crumbs attract insects which attract spiders and centipedes that feed on insects. Practice sound field sanitation measures.
- b. Treatment of insect and spider bites:
  - (1) Keep patient quiet and send for medical aid.
  - (2) The puncture should be cleaned with an application of mild antibacterial agent.
  - (3) Cool the area for 10 to 12 inches around the puncture point with ice if available.

## **Table N-2. Heat Casualty Prevention**

### **N-2-1. General**

Exposure to high environmental temperatures produces stress in the body which may lead to clinical illness and disability. In addition, over exposure of the skin to ultraviolet radiation of the sun burns the skin and can lead to other forms of heat injuries. Some heat injuries are not dangerous, and recovery is rapid and complete. However, others are serious and require early and intense treatment. These may produce permanent damage and sometimes result in death. Therefore, Commanders must exert maximum effort to prevent the occurrence of heat injuries and in the event of an injury treatment should be initiated immediately. The training and readiness benefit must be weighed against the associated danger and training plans moderated when necessary to safely accomplish the training objective.

### **N-2-2. Preventative Measures**

The following list of preventative measures will assist in protecting the force:

- a. Ensure an adequate supply of potable water is available for the quantity of personnel to be trained.
- b. Conduct field lectures and rest periods in the shade and ensure adequate consumption of water.
- c. Enforce the buddy system and ensure that personnel understand and recognize the symptoms of heat cramps, heat exhaustion, and heat stroke.
- d. Ensure that all meals are eaten in order to replace salt loss.
- e. Recognize that wearing Personal Protective Equipment (PPE) or Chemical Protective Clothing adds 10 degrees to the measured Wet Bulb Globe Temperature (WBGT).
- f. Modify work/training schedule with rest periods based on heat phases.
- g. Maintain communications with Range Control in the event you require medical assistance or evacuation.
- h. Wear loose fitting clothing and wear sunscreen.
- i. Acclimatize personnel to the weather conditions.
- j. Monitor personnel for signs and symptoms of heat injury even during moderate heat; identify personnel with previous heat injuries prior to initiating training ensuring you monitor them closely.
- k. Conduct training on heat injuries prior to exposing your personnel to the elements giving them a better chance at protecting themselves and their fellow personnel. The

Individual Safety Card, GTA 05-08-012, is available online at <http://www.apd.army.mil/>, or at the ASA Dix Training Support Center (TSC) Building 5411 Alabama Avenue.

### **N-2-3. Safety Information for Heat Injury Prevention and First Aid**

#### **a. Heat Cramps**

##### **(1) Symptoms**

- (a) Muscle cramps (arms, legs, and/or stomach)
- (b) Heavy sweating (wet skin)
- (c) Extreme thirst

##### **(2) First Aid**

- (a) Move the individual to a shady area, and loosen their clothing
- (b) Have the individual drink a sports drink or at least one canteen of water mixed with a packet of salt (1/4 teaspoon).
- (c) Watch the individual. Continue to give him water if he accepts it.
- (d) Get medical help if cramps continue.

#### **b. Heat Exhaustion**

##### **(1) Symptoms**

- (a) Heavy sweating with pale, moist, cool, or hot skin
- (b) Weakness
- (c) Dizziness
- (d) Fatigue
- (e) Heat cramps
- (f) Nausea (with or without vomiting/diarrhea)
- (g) Tunnel vision
- (h) Chills (goose bumps)
- (i) Rapid breathing
- (j) Confusion
- (k) Tingling of the hands and/or feet

##### **(2) First Aid**

- (a) Move the individual to a cool, shady area, and loosen/remove their clothing.
- (b) Pour water on the individual and fan them to permit a cooling affect.
- (c) Have the individual slowly drink at least one full canteen of water.
- (d) Elevate the individual's legs.
- (e) Get medical help if symptoms continue.
- (f) Watch the individual until symptoms are gone or until medical help arrives.

#### **c. Heat Stroke**

##### **(1) Symptoms**

- (a) Hot
- (b) Disoriented
- (c) Delirious
- (d) Unconscious
- (e) See Heat Exhaustion Symptoms
- (f) No sweating (red, flushed, hot, dry skin)

##### **(2) First Aid**

- (a) Heat Stroke is a Medical Emergency, contact Range Control for medical evacuation immediately!
- (b) Move the individual to a cool, shady area, and loosen or remove their clothing.
- (c) Remove outer and/or protective clothing if the situation permits.
- (d) Start cooling the individual immediately. Immerse them in water, fan to cool them, and massage their extremities and skin with cool water.
- (e) Elevate the individual's legs.
- (f) Have the individual slowly drink one full canteen of cool water if they are conscious.

**Figure N-1. HEAT PHASE GUIDELINES**

	PHASE I	PHASE II	PHASE III	PHASE IV	PHASE V
<b>WBGT INDEX</b>	78-81.9	82-84.9	85-87.9	88-89.9	90+
<b>UNIFORM</b> Trousers un-bloused. Jackets may be unbuttoned or removed as situation dictates. Keep skin covered in the sun.		SAME	SAME	SAME	SAME
<b>WORK / REST (Minutes)</b>	Continuous	50 / 10	45 / 15	30 / 30	20 / 40
<b>WATER INTAKE (Quarts / Hour)</b>	1 / 2	light work ½ heavy work 1	light work 1 heavy work 1 ½	light work 1 ½ heavy work 2	More Than 2
<b>PT Not Acclimated</b>		In shade when possible	30 min in shade (not on hard surface)	None	None
<b>PT Acclimated</b>				Not on hard surface	30 min in shade. Not on hard surface.

**NOTE:** These guidelines are a tool for the Commander; it is the Commander's decision based on personnel and type of training as to what actions are to be taken.

Range Control will announce heat categories on the WBGT on Motorola Channel 1 and FM 34:30 as they change throughout the day.

## **Table N-3. Cold Weather Injury Prevention**

### **N-3-1. General**

Exposure to low temperatures produces stress in the body which may lead to clinical illness and disability. In addition, over exposure of the skin to moisture and cold temperatures can lead to other forms of cold injuries. Some cold injuries are not dangerous and recovery is rapid and complete. However, others are serious and require early and intense treatment. These may produce permanent damage and sometimes result in death. Therefore, Commanders must exert maximum effort to prevent the occurrence of cold injuries. In the event of an injury, treatment should be initiated immediately. The training and readiness benefit must be weighed against the associated danger and training plans modified when necessary to safely accomplish the training objective.

### **N-3-2. Preventative Measures**

- a. Wear sufficient clothing and equipment to keep your body warm; dress in layers.
- b. Avoid prolonged exposure of unprotected skin to extreme cold and/or windy conditions.
- c. Keep clothing and equipment as dry as possible. Change socks at least daily or more often if they are damp.
- d. Keep clothing loose so that circulation is not decreased.
- e. Remove clothing layers as appropriate to limit sweating during activity.
- f. Eat hot meals and drink hot liquids; maintain food and fluid intake.
- g. Be aware that the risk of cold injury increases in wet weather or when wearing wet clothing, particularly if the wind-chill is 40 degrees or below.

### **N-3-3. Cold Injury Symptoms and First Aid**

- a. Trench foot
  - (1) Symptoms
    - (a) Itching, numbing, or tingling pain
    - (b) Feet that are swollen and turn faintly red, blue, or black
  - (2) First Aid
    - (a) Prevent further cold exposure
    - (b) Remove wet and constrictive clothing
    - (c) Wash and dry the foot gently
    - (d) Elevate the foot
    - (e) Cover the foot with layers of loose, warm clothing; allow warming
    - (f) Do not massage the foot or expose it to extreme heat
    - (g) Do not walk on the foot
- b. Frostbite
  - (1) Symptoms: skin that is numb turns gray or waxy white and feels cold and stiff to the touch.
  - (2) First Aid
    - (a) Prevent further cold exposure
    - (b) Remove wet and constrictive clothing

- (c) Warm the injured site gradually by direct skin-to-skin contact or a modest heat source
- (d) Evacuate for medical treatment.
- c. Hypothermia - **Is a Medical Emergency**
  - (1) Symptoms
    - (a) Confusion
    - (b) Bizarre behavior
    - (c) Withdrawal from group interaction
    - (d) Unconsciousness with nearly undetectable breathing and pulse.
  - (2) First Aid
    - (a) Evacuate for medical treatment
    - (b) Prevent further cold exposure
    - (c) Remove wet clothing
    - (d) Warm by covering with blankets or sleeping bags

**Table N-4. Preventive Actions for Adverse Weather Conditions**

#### **N-4-1. Lightning General**

The possibility of electrocution increases during a lightning storm or during rainstorms. Range Control will broadcast warnings of approaching storms when we are advised by the weather advisory system. Be cognizant of the projected weather conditions for your training event and be prepared to modify your event objectives or training schedule. Commanders on the ground are responsible for making training status decisions.

#### **N-4-2. Lightning Protective Measures**

- a. Take cover inside grounded buildings if available
- b. Seek low-lying areas (valleys, ditches, foxholes)
- c. Avoid bare ridges on hilltops
- d. Avoid standing under a single tall tree or in water
- e. Stack weapons and disperse personnel. **DO NOT LIE DOWN!**
- f. Avoid tents and vehicles with cloth tops
- g. Avoid items of good conductivity (wire, water, weapons, antennas, equipment, shovels, and radios)
- h. Observe the 30-30 Rule: If the time between lightning and thunder is “30” seconds or less, seek shelter. Wait “30” minutes or more before leaving proper shelter. Seek shelter if you hear thunder or see lightning. Try to get inside a substantial building, stay indoors for thirty minutes after the last audible thunder.

#### **N-4-3. Lightning Alert Categories**

**YELLOW:** Lightning is within 25 miles. Designate someone to be a weather watcher and monitor the weather. **Be ready** to evacuate.

**ORANGE:** Lightning is in the immediate area. Make sure everyone is aware of the safety evacuation plan and begin to store any material in use. **Begin Evacuation.**



**RED: Evacuate according to your safety plan.** If possible, get everyone indoors. Wait a minimum of 30 minutes after the storm has passed to resume activities.

#### **N-4-4. Tornado General**

Tornados are typically associated with severe rain and rapid temperature changes; the spring and fall are times of extreme activity. Range Control will broadcast warnings of approaching storms when we are advised by the weather advisory system. Be cognizant of the projected weather conditions for your training event and be prepared to modify your event objectives or training schedule.

#### **N-4-5. Tornado Protective Measures**

- a. If a tornado is sighted while on a range or in a training area, move away from its path at a right angle.
- b. If there is not enough time to escape, lie flat in the nearest depression.
- c. If you are in a building, go to the basement or the lowest level into an internal hallway.

#### **N-4-6. Hurricanes General**

Due to our proximity to the Atlantic Ocean, hurricanes pose a real threat. Hurricane season is from June 1st thru November 30th and tend to take time to develop and travel up the east coast so planning to avoid the hazard is the essential piece to safe training.

#### **N-4-7. Hurricane Readiness Conditions and Responsibilities**

**Hurricane Condition 4 (HC4):** A hurricane has been detected, path established, and/or trend indicates a threat of hurricane force winds within 72 hours.

Commanders/Leaders monitor storm progress, thoroughly inspect buildings/areas of responsibility, secure equipment, and follow instructions by Range Control and 87 SFS.

**Hurricane Condition 3 (HC3):** Hurricane is advancing and/or hurricane force winds are possible within 48 hours. Commanders/Leaders monitor storm progress, thoroughly inspect buildings/areas of responsibility, secure equipment, and follow instructions by Range Control and 87 SFS.

**Hurricane Condition 2 (HC2):** Hurricane force winds are indicated and/or anticipated within 24 hours. Commanders/Leaders/All Personnel take appropriate measures to secure movable objects, make provisions for emergency lighting in case of power failure (flashlight, chemical lights, candles, etc.), secure flammables, and ensure an adequate supply of nonperishable food and water is available for emergency use.

**Hurricane Condition 1 (HC1):** Hurricane force winds are indicated and/or anticipated within 12 hours. Follow instructions by Range Control and 87 SFS in order to maintain order, protect property as required, and curtail non-essential vehicle traffic.

#### **N-4-8. Hurricane Protective Measures**

- a. When a hurricane is imminent, most civilian personnel will be released from duty. Windows and doors will be closed initially. When the hurricane strikes, slightly open windows on the lee side (side sheltered from the wind) to relieve internal pressure built

up by the winds. Building occupants should remain inside seeking shelter on any lower floors next to the windward side staying clear of windows.

b. If outdoors, seek shelter in ditches, hollows, assume the prone position, and keep clear of trees, fallen wires, and small buildings. Military personnel required to perform emergency duties outside will wear helmets and appropriate personal protective clothing/equipment (gloves, eye protection, etc.). Military personnel in training areas will be moved out of wooded areas into the open and must dig emergency shelters such as foxholes and slit trenches.

c. If driving, pull off the road, stop, and seek the nearest shelter. Vehicles should be garaged, if possible, if not they should be dispersed in open areas and parked in low level terrain to afford maximum protection from the wind and flying objects.

## **Table N-5. Snowstorm Precautions**

### **N-5-1. General**

New Jersey's geographical location lends itself to two types of winter snowfall, snows coming over the Pennsylvania Mountains from the west and heavy precipitation traveling up the east coast called Nor-Easters. Typical snowfalls range from 19" to 56" annually; however, we have experienced severe storms in the range of 36" to 65" in a short period of time. The State of New Jersey may declare a state of emergency whereas all vehicles are required to remain off the state, county, and local municipality roads to allow snowplows to clear the roads. The JB MDL Commander is responsible for the safety and operation of the base and is the only individual authorized to determine status of operations on the base.

### **N-5-2. Preparatory Measures**

a. The Range Control firing desk will monitor weather conditions and broadcast predicted snowstorm advisories. Units monitoring the frequency should use the information to determine if operations can continue or if modification of training plans is necessary.

b. Secure all non-essential equipment to prevent damage or loss in the event of heavy snowfall.

c. Conduct vehicle inspections and correct deficiencies to improve vehicle operations paying particular attention to:

(1) Windshield wipers

(2) Windshield washer fluids

(3) Tire inflation and tread wear

(4) Safety equipment is present i.e., windshield scraper, first aid kit, warning triangles, and shovel

### **N-5-3. Actions During and Immediately After Snowfall**

a. Clear vehicles of all snow prior to operation to prevent excess snow blowing off your vehicle and causing a hazard to other vehicles on the road. Ensure you have a 360-degree clear view and that your exterior mirrors are useable.

b. Remove vehicle from primary roads to allow snowplows clear right of way.

c. Modify driving to the conditions present on the roads, **SLOW DOWN**.

d. Only Range Service Division personnel are considered key and essential personnel for the purpose of snow removal. When the installation closes, it will be announced on the weather line @ 609-562-4328. **Range Control does not close and we do not dictate a unit's training status.**

## **Table N-6. Field Heaters and Carbon Monoxide Exposure**

### **N-6-1. General**

Field operations during cold weather will necessitate the use of field heaters, immersion heaters, and fueled field kitchen burners. Only trained and licensed personnel may operate fuel fed devices and appropriate fire extinguishers will be present when in use. Technical Manuals and Field Manuals for the equipment to be used and operations to be performed will be present at the training site.

### **N-6-2. Field Heaters**

a. Commercially procured space heaters are not authorized for use in Army field training or operations. Activities will use only heaters the U.S. Army Soldier Systems Center authorizes for Army use. Information regarding these heaters is available on their website at <https://www.army.mil/info/organization/natick>.

b. The following procedures apply to authorized space heaters:

(1) Have competent individuals, familiar with leak test procedures, set-up heaters; only personnel trained will operate heaters. The responsible unit fire or safety representative will inspect each heater before use.

(2) Set-up, add fuel, use, and maintain heaters IAW the applicable Technical Manual (TM). Only use fuels the applicable TM specifies and approves for use.

(3) The only authorized modifications to heaters are those that either a Modification Work Order or Safety of Use Message approved.

(4) The use of any non-vented heater is prohibited. Use the vent stack provided with the heater to vent the heater to the outside of the tent, structure, or shelter.

(5) Ensure all heaters are equipped with an emergency fuel shut-off.

(6) Set-up heaters on a firm and level fireproof base, located in a marked area free of clothing or combustible material.

(7) Ensure a fire watch is on duty any time solid or liquid fueled heaters are in use. Brief the fire watch on procedures for firefighting with appropriate extinguishing agent and early recognition of signs of carbon monoxide (CO) poisoning.

(8) Do not operate heaters while unattended.

(9) If the fuel tank is a separate component of the space heater, locate it on the outside of the tent or shelter.

(10) Do not use CO detectors. Carbon monoxide detectors are not designed or proven for outdoor use and do not have a means for calibration. Used in an outdoor environment, CO detectors provide a false sense of safety and early warning.

c. Organizations other than Army units requesting to use an alternate means of heating must provide authorization signed by a General Officer in the chain of command and provide operating literature/publications to the range safety office.

### **N-6-3. Carbon Monoxide Exposure**

- a. Train personnel in the hazards of carbon monoxide.
- b. The most common source of carbon monoxide is exhaust from internal combustion engines and field heaters in confined spaces with inadequate ventilation, i.e., tanks, APCs, communication vans, and other enclosed areas where portable internal combustion engines and heaters are used.
- c. Commanders must ensure that:
  - (1) Personnel don't sleep in, on, or near fuel powered vehicles with a running engine (heater).
  - (2) Adequate ventilation is provided when engines, generators, battery chargers, and space heaters are operated.
- d. Recognizing Carbon Monoxide Poisoning and First Aid:
  - (1) Signs and Symptoms: throbbing temporal headache, generalized weakness, dizziness, dimness of vision, nausea, vomiting, loss of muscular coordination and collapse, increased pulse/perspiration, unconsciousness.
  - (2) First Aid:
    - (a) Remove individual from contaminated environment to fresh air
    - (b) If respiration is weak/absent, administer artificial respiration and seek medical help immediately.

## **Appendix O**

### **Vehicle Operations**

#### **O-1. General**

- a. Vehicles are prohibited from operating within 50 feet of buildings (unless in designated parking space/unloading zone) and within 200 feet of bivouac sites.
- b. Privately owned vehicles (POV) are prohibited from entering or parking down range on any facility, POVs will utilize the marked parking areas on ranges and will be combat parked.
- c. Vehicles will utilize existing roads and established tank trails to avoid damage to wildlife, vegetation, and terrain.
- d. Sleeping directly in front of, behind, or under vehicles is prohibited. If sleeping in a vehicle the engine, heater, or other carbon monoxide producing equipment will be turned off. On combat vehicles all turret power systems will be shut down.
- e. Troop safety straps will be utilized for vehicles transporting troops in the cargo bed.
- f. Vehicles will not move over any firing berms, target berms, or protective berms.
- g. Helmets will be worn by all personnel operating or riding in tactical vehicles while in the JB MDL training area.
- h. Prior to starting vehicles, operators and crews will conduct a walk around of their vehicle to ensure personnel or facilities are not endangered by the vehicle's movement.

#### **O-2. Speed Limits**

- a. Wheeled Vehicles:
  - (1) Hard surfaced roads - as posted
  - (2) Because of dangerous curves, the speed limit for vehicles 2 ½ ton and above is reduced by 10 miles per hour below the posted speed limit on hard surfaced roads.
  - (3) Improved tank trails - 30 miles per hour
  - (4) Unimproved roads and tank trails - 20 miles per hour
  - (5) Off road travel - 10 miles per hour
- b. Track Vehicles:
  - (1) Improved tank trails - 25 miles per hour
  - (2) Unimproved roads - 20 miles per hour
  - (3) Off road travel - 10 miles per hour

#### **O-3. Parking**

Vehicles will only park in designated areas as follows:

- a. Parking on the tank trail, other roads, or along the shoulder of the road is prohibited except in cases of emergency. When an emergency necessitates stopping, hazard warning triangles will be displayed to allow other vehicles the time to react and avoid an accident.
- b. Units with an excess number of vehicles will coordinate with Range Control for additional parking areas. The unit is responsible for shuttling their personnel to their training site.

- c. All drivers will Combat Park their vehicles. Combat Park is defined as vehicles parked in a manner which allows them to pull forward to exit their parking location.
- d. Ranges:
  - (1) Vehicles will park at their ranges only; all vehicles will be combat parked.
  - (2) The OIC will ensure there is sufficient room for emergency vehicles to enter the range.
- e. Bivouacs:
  - (1) Parking is prohibited within 200 feet of sleeping personnel.
  - (2) Vehicles will not impede either the entrance to the bivouac site or the main road.
- f. TAC Areas:
  - (1) Units will not use bivouac sites or other training venues located within a tactical area without prior approval from Range Control.
  - (2) Units will not park at Times Square or at the corner of Times Square in TAC 13B.

#### **O-4. Ground Guides**

- a. The use of ground guides is encouraged for all vehicles operating on JB MDL.
- b. Ground guides will be used anytime drivers cannot clearly see the trail or route of travel.
- c. Ground guides are mandatory when vehicles enter or move within assembly areas.
- d. Backing Vehicles:
  - (1) Ground guides are mandatory when backing vehicles over 1 ¼ ton and all track vehicles.
  - (2) Two ground guides are required when backing tracked vehicles in assembly areas or other congested areas containing personnel, equipment, or obstacles.
  - (3) Wheeled vehicles normally require one ground guide; however, two ground guides will be used when visibility is restricted, i.e., fog, hours of darkness.

#### **O-5. Convoy Operations**

- a. JB MDL has a shared road network with the state and local governments; no one is authorized to impede travel on the roads or deny the use of movement on these roads for training. Unrestricted movement of vehicles by convoy is authorized from one location to a second location as long as the convoy consists of chinks with ten vehicles or less.
- b. Units wishing to conduct ambush operations or at the halt operations for training events in conjunction with convoy operations will request permission from the Range Safety Office 48 hours prior to the start of the event by submitting a strip map outlining the location, times of the events, and the pyrotechnics requested to be used.
- c. Road guards and barriers will be utilized to prevent non-participating traffic from interfering with the event. All barriers will be manned and illuminated during the hours of darkness.



## **O-6. Night Vision Device and Black Out Drive**

a. NVD operations may be conducted in designated training areas when the following conditions are satisfied:

- (1) Moon illumination is greater than 25%.
- (2) Moon elevation is greater than 30 degrees above the horizon.
- (3) Approved drivers training areas and tactical training areas are requested beforehand through TD.
- (4) Personnel have trained with NVDs and are licensed IAW service directives.
- (5) Risk assessment is conducted and on site for inspection by Range Operations.

b. Blackout drive may be used in driver training areas and tactical areas scheduled for use through TD; Blackout drive will not be used on any hard surface roads.

c. NVD and blackout drive for tracked vehicles will only be conducted in conjunction with live-fire exercises on ranges 61/65/85. Tracked vehicles moving to and from these ranges will use service lights on and hatches open. Crew members will wear Combat Vehicle Crewman (CVC) helmets.

d. Non-tactical vehicles not equipped with blackout will not use parking lights in lieu of blackout lights.

e. Speed Limits:

- (1) Tracked vehicles using NVD or blackout drive is 5 MPH
- (2) Wheeled vehicles over 1 ¼ ton using NVD or blackout is 5 MPH
- (3) Wheeled vehicles 1 ¼ ton and under NVD or blackout is 10 MPH

f. Units scheduling areas will annotate on the request the desire to utilize blackout drive or NVD to facilitate TD scheduling you into areas authorized for their use; the following areas are authorized for NVD and blackout drive use:

- (1) Driver Training Areas (DTA) 4 and 5
- (2) TAC Areas: 9 B/C/D; 11 A/B; 12 A/B; 13 A/B/C

## **O-7. Track Vehicle Operations**

a. Movement of tracked vehicles is confined to established tank trails, unimproved roads, unimproved tank trails, and within TAC areas. No tracked vehicles may utilize hard surface roads without prior approval from Range Control (Range Complex Areas) or TD for other areas. Coordination with the 87 SFS must be accomplished for hard surface road travel.

b. Track vehicles operate with hatches locked open along tank trails and other main roads. vehicle commander and driver will both have their eyes above the edge of the hatch opening to directly see the road or tank trail.

c. Track vehicles utilizing or entering areas in the vicinity of built-up areas, ranges, or training facilities will have the hatches locked open and utilize ground guides until clear of the area. This is done regardless of the training situation.

d. Track vehicles may operate "buttoned up" along trails within the unit's assigned tactical area provided both vehicle commander and driver are unmasked. Road guards and/or barriers will be used to ensure vehicles not involved in the training do not enter the area where tactical driving is taking place.

e. Track vehicles will not operate on the shoulders of hard surface roads.

f. Track vehicles will stop at all road crossings.

- g. Road guards will be posted for all crossing operations.
- h. Units must utilize the reinforced track crossings as much as possible.

#### **O-8. Breakdowns**

- a. Vehicles that break down must be moved to the shoulder of the road in order to permit other traffic to pass safely.
- b. If traffic will be obstructed, the unit will make provisions to direct traffic safely around the vehicle until the vehicle is on the shoulder of the road or recovered.
- c. Vehicles that break down will not be left unattended and unsecured.
- d. Drivers will make the necessary provisions to notify their units then return and remain with the vehicle until help arrives.
- e. Drivers will utilize warning flashers and place warning triangles behind the vehicle.
- f. Vehicles that breakdown will contact Range Control 609-562-4600/4650 and report their location and the reason for the breakdown.
- g. POV or commercial vehicles that breakdown must make arrangements to self-recover.

#### **O-9. Use of Earphones and Headphones**

As outlined in JB MDL policy, joggers, bicyclist, skaters, skateboarders, and operators of motorized vehicles are prohibited from wearing sound producing earphones or headphones while on JB MDL. This does not include medically required hearing aids that enhance existing sounds rather than interfere or obscure them. This also does not prohibit the use of hearing protection devices or intercommunication systems while operating Military motorized equipment. Hearing protective devices shall be worn in vehicles posted as noise hazardous.

#### **O-10. All-Terrain Vehicles (ATVs) & Motorcycles**

- a. The use of privately owned ATVs and motorcycles are prohibited in the training areas.
- b. Government licensed and registered ATVs and motorcycles are authorized for military training. TAC Areas and DTAs will be scheduled through TD and vehicles will be transported to the training site in compliance with state motor traffic laws.
- c. Operators of military owned motorcycles will complete an approved Motorcycle Safety Foundation Course.
- d. A military uniform along with the following protective equipment will be worn while operating ATVs or Motorcycles:
  - (1) Approved motorcycle safety helmets will always be worn while operating the vehicle; chin safety straps will be worn.
  - (2) Goggles or helmet mounted face shields will be worn.

## **Appendix P**

### **Range Sanitation Procedures**

#### **P-1. General**

- a. Foxholes, bunkers, tent ditches, and all open pits will be filled in prior to facility clearance.
- b. All training areas must be properly policed and serviced by the using units according to the Range Control checklist provided in each range book. Range Control will use this checklist when inspecting your facilities.
- c. A rule of thumb is, leave it cleaner than you found it. If upon arrival you conduct an area inspection and find deficiencies, report them to Range Control otherwise you will be held responsible.
- d. Coordination for any resources to meet your sanitary needs can be made at the 10 Day Out Final Coordination Meeting prior to your training event held every Wednesday at 1300 hrs.

#### **P-2. Latrine Facilities**

- a. Only established chemical latrines and contractor serviced portable latrines are authorized to be used on ASA Fort Dix. Digging field latrines, slit trenches, or field expedient measures is not authorized.
- b. Chemical latrines that have been inspected and determined safe for use will be utilized to the maximum extent possible in the training complex; within TAC Areas and facilities where the chemical latrines do not pass inspection or there are no latrine facilities, portable latrines will be positioned for use IAW unit manning. Units requesting portable latrines when a viable chemical latrine is available will be required to cover the cost of the portable latrine service.
- c. Units will maintain assigned latrines in a high state of police. Toilet paper and cleaning supplies are the responsibility of the using unit. Portable latrines are serviced by a contractor on a regular schedule; if in your opinion the latrine requires servicing, contact the Range Operations at 609-562-4600.
- d. Moving portable latrines is not authorized without Range Control permission.

#### **P-3. Disposal of Waste Material**

- a. Trash will be bagged and deposited in the dumpsters at Range Control Headquarters.
- b. Batteries will be separated and turned in at the HAZMAT Collection site, Bldg. 8131 Old Range Road.
- c. Garbage and kitchen waste will be removed from the range complex and transported to the waste dumpsters at Range Control.
- d. Large items must be broken down and flattened prior to depositing them into the dumpsters.
- e. Lumber, cardboard, and metal items are to be deposited in the dumpsters located at Range Control Headquarters or at COL Victory; the dumpsters are marked as to the materials authorized to be placed in them.
- f. All ammunition residue must be returned to the ASP for proper disposal.

g. Do not deposit any trash into the latrines; units will not clear until the garbage is recovered and disposed of properly.

h. Organizations conducting messing operations may request dumpster support within the Bivouac Area; identify your requirements in your RFMSS communication block on your request.

**P-4. Grey Water**

Water from kitchens and bathing operations cannot be dumped onto the ground. Grey water tanks must be requested on RFMSS request.

**P-5. Water Purification Operations**

Water purification units will request water recovery tanks on their RFMSS request in the communications block. Once water is chemically treated, it cannot be returned to the environment. The water must be used for consumption, showers, or field messing and recovered accordingly or disposed of through recovery tanks.

## **Appendix Q**

### **Laser Operations**

#### **Q-1. General**

- a. Laser Systems, except for the inability to penetrate targets, must be treated like direct fire line of sight weapons.
- b. Lasers include, but are not limited to:
  - (1) AN/GVS-5: Laser Infrared Observation Sets (LIOS)
  - (2) AN/TVQ-2: Ground/Vehicle Laser Locator Designator (G/VLLD)
  - (3) AN/PAQ-3: Modular Universal Laser System (MULE)
  - (4) AN/VVG-2: Stryker 105MM Tank Laser Range Finder
  - (5) AN/VVG-3: M1 Tank Laser Range Finder
  - (6) Attack Helicopter Target Acquisition Designation System (TADS)
- c. Units requiring the use of lasers, even integral to weapons, will identify the lasers by type and date/time to be used on the units RFMSS request. For use of MILES write, "MILES will be used."
- d. Units will forward a safety fan to Range Control Safety Office ten (10) days prior to the desired training date. Safety fan overlays will include the following:
  - (1) Type Laser
  - (2) Date/Time of Use
  - (3) Right and Left Limits
  - (4) Firing Point vertical/horizontal buffer zones
- e. Safety fans are not required for MILES.

#### **Q-2. Hazards**

- a. Lasers, which are not eye safe, can severely injure the unprotected eyes of individuals who view the laser beam directly or a beam which has been reflected off a flat mirror like surface.
- b. The hazard of exposure to the skin is small compared to the eyes; however, direct exposure to the skin should be avoided.
- c. Optical Devices:
  - (1) The use of optical devices to observe the target during laser operations is not permitted unless appropriate laser safety filters are placed in the optical system. Utilizing optical devices with laser safety devices should be kept to a minimum.
  - (2) All eye wear and filters must be marked with their optical density at the specific wavelength for which they are used.
  - (3) Selection of eye wear and filters must be IAW TB Med 524 for the test system used.
  - (4) Eye wear and filters must be inspected for scratches, chips, and cracks; maintained in a clean condition and replaced when inspections show them to be no longer serviceable.

#### **Q-3. Safety Requirements**

- a. Beam termination during laser operations: no portion of the laser beam can extend beyond the controlled target area or out of the impact area.

(1) Horizontal and Vertical buffer zones will ensure the laser beam terminates in the controlled target area.

(2) Targets must be located where they have a geographical backstop, i.e., hill or rise in the ground.

b. Buffer Zones:

(1) Horizontal Buffer Zones extend to the right and left of the target and normally coincide with the right and left limits of the range.

(2) Vertical Buffer Zones extend down from the horizon and are established IAW Chapter 18, DA Pam 385-63. In those cases where an adequate vertical buffer zone does not exist, but the Nominal Ocular Hazard Distance (NOHD) stays within the impact area, the vertical buffer is the top of any approved target falling within the right and left limits of the range.

c. Training filters reduce the NOHD and greatly improve system safety; however, they do not render the laser eye safe. These filters may also reduce the engagement range of the system but should be used to the fullest extent possible.

d. Eye Safe Laser Filter (ESLF) devices for the M1 Tank Laser Range Finder, when properly installed, render the eye laser safe; however, direct viewing of the beam should still be avoided.

e. Personnel who must be in the target area will wear laser protective eye wear with curved lenses during laser operations. Eye wear must be approved for the specific model laser device being used. A laser filter designed for protection against one type of laser may not afford protection from another.

f. Laser devices must not be operated or experimented with when removed from the vehicle, unless specifically authorized by the appropriate maintenance manual.

#### **Q-4. Officer in Charge (OIC)**

Each range utilizing lasers will have an OIC in the grade of E-7 or above and they must be laser safety certified; responsible for all aspects of operations on the range.

#### **Q-5. Laser Range Safety Officer (LRSO)**

a. Each range utilizing lasers will have a LRSO in the grade of E-6 or above and they must be laser safety certified; responsible for all aspects of operations on the range.

b. The LRSO:

(1) Will be always on the range when lasing is being conducted.

(2) Conducts a safety briefing for all personnel on the range, both active participants and personnel not directly involved with the lasers.

(3) Ensure operators lase only designated targets which diffuse reflectors and that vertical buffer zones are not exceeded.

(4) Ensure no mirror like surfaces, such as target vehicle windshields and water surfaces are engaged.

(5) Ensure no personnel are permitted forward of a laser once the laser exit point is uncovered.

(6) Ensure the laser is not operated outside the range area; the laser exit port is covered with an opaque dust cover and the laser is disabled IAW the appropriate TM/FM governing the weapon system when not in use.

(7) Ensure only approved eyewear is used



(8) Immediately report any case of suspected eye exposure; the individuals exposed to possible lasers will undergo an eye exam within 24 hours of exposure.

#### **Q-6. Off/On Range Travel**

a. Off range travel is travel on other than approved laser range i.e., tank trails, training areas, etc. When traveling off range, laser ports will be closed and locked on vehicles so equipped; ballistic doors/covers will be closed on all other vehicles. Off range travel by M1 tanks is not authorized unless the ESLF device is properly installed and power to the laser is turned off.

b. Once a vehicle or laser system arrives at an approved laser range, laser ports will remain covered and the power off until the vehicle arrives at the firing line. ESLF devices may be removed from M1 tanks upon arrival; however, the laser switch safety shield remains in place and the ballistic doors remain closed and the power off until the tank arrives at the firing line. At the completion of firing, laser ports are covered prior to leaving the firing line.

#### **Q-7. Range Operations**

a. When opening ranges where lasing is to take place, the type of laser is reported along with the other required opening information.

b. LRSO data is reported to Range Control if different from the Range Safety Officer (RSO).

c. The LRSO and RSO may be the same individual provided he/she meets the criteria for both the weapons system and the laser fired.

d. Laser firing is not permitted when standing water or reflective material is observed within 30 meters of the target area.

e. Prior to lasing:

(1) The OIC must check with Range Control to ensure there are no restrictions.

(2) The OIC/LRSO checks to ensure there are no unnecessary/unprotected personnel in the Laser Surface Danger Zone (LSDZ).

f. During lasing:

(1) Communications will always be maintained with the lasing section/vehicle.

(2) Lasing ceases immediately whenever control of the laser beam is lost.

(3) Lasing at any surface at a range of 20 meters or less is not authorized.

(4) Lasers fire only at targets which are diffuse reflectors.

(5) Anyone observing an unsafe act or situation should immediately call for a cease fire. Lasing does not resume until the LRSO has investigated the situation and declared it safe to lase.

(6) Once the laser is on the firing line, no one is permitted down range unless on a moving target detail and protected properly.

(7) Inclement weather and night operations require no additional safety requirements.

(8) Animals will not be lased.

(9) When moving from one firing point to a second firing point, the power to the laser must be turned off and the LRSO informed of the action prior to the vehicle moving.

g. After lasing, the laser is turned off and the covers replaced before leaving the firing line.

### Q-8. Airspace

When lasing is being conducted, units will ensure that neither the laser beam nor the reflected beam approach an aircraft. Range Control will notify McGuire RAPCON of lasing operations for the protection of pilots; however, units must still be aware of stray aircraft and cease lasing immediately when an aircraft approaches possible hazardous areas.

### Q-9. Miles

The MILES laser system is different from other lasers in that it is designed to be used in Force-on-Force training and it may be used in any training area on USASAFD. The system is not considered eye safe within the distances or the NOHD as listed in Table Q-1.

**Table Q-1. MILES Safety Distances**

TYPE	NOHD W/O OPTICS	NOHD W/MAGNIFIED OPTICS
M4, M240, .50 Cal	7 METERS	0 METERS
TOW Missile, Dragon, Vulcan	12 METERS	75 METERS
VIPER Controller Gun	0 METERS	0 METERS
Tank Main Gun, STINGER	12 METERS	120 METERS
The key to using the MILES system safely on an individual basis is not to fire closer to the target than the safe distance for the blank round of that weapon. The MILES system is not subject to the procedures outlined in this appendix; however, units should ensure all safety precautions prescribed in the appropriate FM/TM are followed, i.e., carrying armed ATWSS cartridges in vehicles is prohibited, etc.		

**Table Q-2. Example Laser Safety Briefing**

LASER SAFETY BRIEFING EXAMPLS
<b>Hazard</b> - The laser system, except for its inability to penetrate targets, must be treated as a direct-fire, line of sight weapons such as a rifle or machinegun. Safety precautions taken for a direct fire weapon will provide most aspects of the safety environment required for the laser.
<b>Eye Hazard</b> - The additional hazard from laser devices is limited to exposure to unprotected eyes of individuals within the direct laser beam or the direct laser beam reflected from reflective surfaces. Serious eye damage with permanent impairment of vision can result to unprotected personnel exposed to a laser beam at ranges less than Nominal Ocular hazard Distance (NOHD).
<b>Nominal Ocular Hazard Distance (NOHD)</b> - The NOHD for direct intrabeam viewing is the distance beyond which an unprotected individual may stand in the beam and be exposed without injury, provided he/she does not look at the lase with unfiltered magnifying optical devices. The hazardous range is greatly increased when viewing the collimated beam with a telescope, field glasses, or other magnifying optics. For instance, the NOHD for the AN/GVS is 1100 meters. This would increase to 8,500 meters for an individual looking back at the laser from within the beam using field glasses.
<b>Laser Surface Danger Zone</b> - No unprotected personnel are permitted in the Laser Surface Danger Zone. Personnel who are required to be in the surface danger zone must wear protective eye wear as

prescribed in TD Med 524 and AR 385-63. Essentially the laser beam travels in a straight line, and as the NOHD for most lasers exceeds the dimensions of the Impact Area, it is necessary to provide a backstop, such as a hill behind the target, during laser operations. This reduces the true hazardous range to the distance to the target or the backstop behind the target.
<b>Targets</b> - Only those targets specified for lasing from a specific firing point will be used. The inadvertent or intentional tracking of non-target vehicles or aircraft is prohibited.
<b>Warnings</b> - Warning signs will be posted on access roads to ranges that may be within the NOHD for magnified optics. All personnel must be aware of the danger of possible eye injury if proper precautions are not followed. All personnel must be warned to report any eye exposure to the LRSO or OIC immediately and informed of the need to have an eye exam within 24 hours of exposure.
<b>Read TM</b> - Do not operate the laser until you have read and understood all operating and safety instructions in the appropriate TM.
<b>Do Not Aim the laser at yourself or anyone else.</b>
<b>Dangerous Devices</b> - Never look into the front of the laser. Treat it as you would the muzzle of your weapon. Because some lasers are handheld and most are not utilized often, it is easy to forget they are dangerous devices and ignore the safety warnings. Do not forget the laser beam can cause blindness.
<b>Range</b> - Only operate the laser on an established laser range under the supervision of the LRSO IAW DA Pam 385- 63, Chapter 18.
<b>PRECAUTIONS</b>
<b>Do Not Fire the Laser</b> - If there is anyone in the Laser Surface Danger Zone who is not wearing laser protective eye wear with curved protective lenses.
<b>Do Not Fire the Laser</b> - at unauthorized targets, civilian vehicles, or targets that are off the range.
<b>Do Not Fire the Laser</b> - at reflective surfaces (flat glass, water, shiny metal, etc.). The reflections are possible hazards.
<b>Do Not Attempt to Repair</b> - the device unless specifically trained and authorized to repair the device.

## **Appendix R**

### **Required Documentation by Training Event**

#### **R-1. General**

a. The following documents are required in order to conduct training in the ranges and training areas of USASAFD:

- (1) Figure R-1, USASAFD Form 2226-R (Inspection Checklist for Ranges)
- (2) Figure R-2, USASAFD Form 2227-R (Automated Range Opening/Clearing Checklist)
- (3) Figure R-3, USASAFD Form 2228-R (Inspection Checklist for Training Areas)
- (4) Figure R-4, USASAFD Form 2229-R (Inspection Checklist for the Shoot House)
- (5) Figure R-5, USASAFD Form 2230-R (Inspection Checklist for CTF RG 59E)
- (6) Figure R-6, USASAFD Form 2251-R (Rappel Master Certification Statement)
- (7) Figure R-7, USASAFD Form 2252-R (Rappel Tower Safety Checklist)
- (8) Figure R-8, USASAFD Form 2258-R (CS Chamber Qualification Statement)
- (9) Figure R-9, USASAFD Form 2259-R (CS Chamber Safety Checklist)
- (10) Figure R-10, USASAFD Form 2260-R (Gunnery Shot Sheet) (Ranges 65/85)
- (11) Figure R-11, USASAFD Form 2270-R (Ruck March Request)
- (12) Figure R-12, USASAFD Form 2254-R (Artillery Safety Card/Fan)
- (13) Figure R-13, USASAFD Form 2255-R (Mortar Safety Card/Fan)
- (14) Figure R-14, USASAFD Form 2256-R (SDZ Info Sheet)
- (15) Figure R-15, USASAFD Form 2257-R (Mk-19 Cleanup Agreement)

b. CONOPs are required for any Live Fire Exercise (LFX) which requires movement, fueling operations, and any operation you will need to explain in order to ensure Range Operations is familiar with your intent. Unit CONOPs must capture all actions from occupation thru weapons clear and request for clearance.

c. Overlays are required for any planned use of CS grenades, Smoke Pots, or planned installation of fragmentation barrels.

d. When CONOPs are turned into Range Operations and reviewed, they are considered an agreement and any planned changes or deviation from your documentation must first be reviewed by the Range Safety Office. Failure to present changes to your approved training plan may cause suspension of the OIC and RSO.

Figure R-1. Inspection Checklist for Ranges (USASAFD Form 2226-R)

INSPECTION CHECKLIST FOR RANGE INSPECTORS AND TRAINING UNITS		
For use of this form see USASA Fort Dix Pam 350-3 The proponent agency is Range Control		
1. To ensure that ranges are maintained and prepared for the next unit's use, each unit will be inspected by a representative from Range Control on the date and time indicated for departure.  2. If a unit occupies a range without signing for it or fails to conduct a pre-inspection, the unit at that time takes full responsibility for the cleanliness and maintenance of the site. Units that conduct a pre-inspection and notify Range Control of pre-existing conditions at the time of occupation will not be required to correct those conditions in order to clear the site.  3. This pre-inspection checklist must be completed prior to requesting an inspector. If the checklist is not completed prior to arrival of the inspector, the inspector will not conduct the final inspection at that time. You will be placed at the bottom of the list for inspection and the inspector will return at his convenience.		
CLEARANCE STANDARDS		
TASK	Pass	Fail
Entire Range policed to include 100 meters into the wood line of the site boundaries. Entire Range Dragged. Reposition the drag under the tower.		
All brass, target material, trash, and residue (to include large branches) removed from the site.		
All fighting positions policed, excess sand removed, steps in place, and sandbags placed in front of the V-notched stakes with the ties facing to the right.		
All target frames upright and serviceable.		
Mess area cleaned.		
Latrine swept, mopped, and urinals/commode seats and floor disinfected.		
Portable latrines cleaned. Need Servicing?		
Ammo point swept and cleaned.		
Telephone plugs/hookups serviceable.		
Fire Extinguishers present and charged.		
All buildings cleaned and free of graffiti, swept and mopped as necessary, secured, power turned off.		
Bleachers cleaned and serviceable.		
Completed Customer Survey.		
Comments:		
RANGE:		
UNIT:	OIC:	
INSPECTOR:	DATE:	

USASAFD Form 2226-R, 1 APR 22

Figure R-2. Automated Range Opening/Clearing Checklist (USASAFD Form 2227-R)

<b>AUTOMATED RANGE OPENING/CLEARING CHECKLIST</b>			
For use of this form see USASA Fort Dix Pam 350-3 The proponent agency is Range Control			
RANGE:		UNIT:	DATE:
OFFICER IN CHARGE:		RSO:	
RANGE CONTROL OPENING INITIALS:		RANGE CONTROL CLEARING INITIALS:	
<b>BEFORE USE:</b> The OIC must assure that each applicable item is present or in effect before allowing firing to commence. If the status of any item is unknown, firing must be delayed until corrective action is taken.			OIC Initials
Appointed OIC and RSO have attended the Range Safety Briefing and possess USASA Form 1174, attesting attendance of range safety course			RSO Initials
Firing to be conducted is included in a CONOP prescribing weapons, ammunition, limits, controls, etc.,			
Medical coverage, as listed on the Deliberate Risk Assessment Worksheet for the training being conducted (Medic and FLA or Combat Lifesaver, CLS Bag), is present on the range			
Hearing protection devices afforded to all personnel			
Range flag/red light is properly displayed to indicate status			
Communication established with FIRE DESK			
Weapons systems current TC/FM/TM on hand			
TC 3-20.40 present on the range TRAINING AND QUALIFICATION - INDIVIDUAL WEAPONS			
OIC and NCOIC are familiar with MEDEVAC procedures			
Fuel/Flammables is/are properly stored, and spill containment procedures are in place			
Safety Briefing has been presented to all personnel involved in the range activity, including but not limited to:			
• Range commands			
• Limits of fire			
• Cease fire signals			
• Ammo controls			
• Troop limits			
• Hearing protection			
• Weapon clearance procedures			
<b>DURING USE:</b> The OIC must assure that all applicable items remain present or in effect. At any time when applicable items cease to be present or in effect, firing must cease.			OIC Initials
Radio communication always maintained with the FIRE DESK			RSO Initials
Range flag/light for status is displayed			
Smoking not permitted within 50 feet of ammunition			
Ammunition not exposed to direct sunlight or rain for extended periods of time			
Record all duds (unexploded ordnance) fired into non-permanent dud areas			
Range/Training Area Fires are reported to Fire Desk Operator IMMEDIATELY!			

ASA Dix Form 2227-R, 1 APR 2022



AUTOMATED RANGE OPENING/CLEARING CHECKLIST (cont.)		
Ammo Issue Point (AIP):		
Ammo is properly stored/secured/segregated and marked with proper signage (blank, live, and pyro)		
Ammo issue areas are properly marked (blank, live, and pyro)		
Dunnage storage areas are properly marked		
2 ea. – 10lb Fire extinguishers are located on site		
Ammo handler/NCOIC is certified and has an Ammo Handler's Card present		
All weapons are cleared		
All explosives, booby traps, simulators, pyrotechnics have been removed		
Roadblocks and guards are removed		
Remove any obstacles/structures emplaced by unit		
Barbed/Razor wire is removed from site		
Range/Training Area damage is reported to Fire Desk Operator		
Obtain closing information from the FIRE DESK:		
• Closing Time		
• Desk Operator's Initials		
THIS SECTION IS TO BE FILLED OUT BY RANGE CONTROL PERSONNEL ONLY!		
<b>RANGE CLEARANCE:</b> When clearing with unit assigned the range, range must be restored to operational condition. Other appropriate requirements may be specified by the assigned unit.		
<b>BUILDINGS POLICED AND SWEEPED:</b>	PASS	FAIL
• Classroom		
• Bleacher Enclosure		
• Mess Area		
• Latrines (To Include Portable Latrines)		
• Ammo Issue Points		
• Control Towers		
Thermostat(s) reset to 60(winter) 70(summer)		
Buildings have required fire extinguisher(s) present		
• Small Classroom, 1 x EA		
• Large Classroom, 2 x EA		
All Lights turned off		
All buildings, windows/doors closed and locked		
Hand receipt items returned to Range Support (Shooting Blocks, Steel Targets)		
All paper targets removed from frames; unused paper targets and frames returned to storage area		
<b>FIRING POSITIONS:</b>		
Raked and policed of brass, links, trash, etc.		
Shooting barricades, if applicable, stored in appropriate area		
Worn and torn sandbags removed from firing line and thrown in trash		

Figure R-3. Inspection Checklist for Training Areas (USASAFD Form 2228-R)

INSPECTION CHECKLIST FOR TRAINING AREA INSPECTORS AND TRAINING UNITS		
For use of this form see USASA Fort Dix Pam 350-3 The proponent agency is Range Control		
1. To ensure that training areas are maintained and prepared for the next unit's use. Each unit will be inspected by a representative from Range Control on the date and time indicated for departure.  2. If a unit occupies a training area without signing for it or fails to conduct a pre-inspection the unit at that time takes full responsibility for the cleanliness and maintenance of the site. Units that conduct a pre-inspection and notify Range Control of pre-existing conditions at the time of occupation will not be required to correct those conditions in order to clear the site.  3. This pre-inspection checklist must be completed prior to requesting an inspector. If the checklist is not completed prior to arrival of the inspector, the inspector will not conduct the final inspection at that time. You will be placed at the bottom of the list for inspection and the inspector will return at his convenience.		
CLEARANCE STANDARDS		
TASK	Pass	Fail
Police entire training area to include 50 meters from the road.		
Remove all trash and residue from the site. (Garbage containers located at Range Control)		
Buildings cleaned, free of graffiti, mopped, and secured.		
Mess area cleaned.		
Chemical latrine swept, mopped, and urinals/commode seats and floor disinfected.		
Portable latrines cleaned. Need Servicing?		
All fighting positions filled in and materials used restored to their natural state.		
All barrier materials removed and properly disposed of.		
All pyrotechnics and ammo brass policed and properly disposed of.		
All training area structures (i.e., obstacle course, confidence course) deficiencies found during training are identified in remarks below.		
Completed Customer Survey.		
Comments:		
TRAINING AREA:		
UNIT:	OIC:	
INSPECTOR:	DATE:	

USASAFD Form 2228-R, 1 APR 22

Figure R-4. Inspection Checklist for the Shoot House RG 59A (USASAFD Form 2229-R)

<b>INSPECTION CHECKLIST FOR THE SHOOT HOUSE RG 59A</b> For use of this form see USASA Fort Dix Pam 350-3 The proponent agency is Range Control		
1. To ensure that the Shoot House is maintained and prepared for the next units use, each unit will be inspected by the Shoot House support personnel on the date and time of departure.		
2. If a unit fails to conduct a pre-inspection, the unit takes full responsibility for the cleanliness and maintenance of the facility. Units that conduct a pre-inspection will report all pre-existing conditions to Shoot House support personnel.		
<b>CLEARANCE STANDARDS</b>		
TASK	Pass	Fail
Entire facility policed, all brass, target material, trash, and residue, to include large branches, removed from the facility.		
All Shoot House rooms vacuumed (DO NOT SWEEP).		
All target frames serviceable and returned the original configuration.		
All doors and door frames serviceable.		
Range support building swept, cleaned, and secured.		
Ammo point swept and cleaned.		
AAR swept and cleaned.		
Parking area policed.		
Fire Extinguishers present and charged.		
Mark all round impacts outside target area. Notify Range Control in the event of a round impact on the range limit marker.		
All panic buttons are accounted for.		
Comments:          		
Unit:	OIC:	
Date:	Inspector(s):	

USASAFD Form 2229-R, 1 APR 22

300Figure R-5. Inspection Checklist for Collective Training Facility (CTF) RG 59E  
(USASAFD Form 2230-R)

INSPECTION CHECKLIST FOR COLLECTIVE TRAINING FACILITY (CTF) RG 59E									
For use of this form see USASA Fort Dix Pam 350-3 The proponent agency is Range Control									
1. To ensure that the CACTAF is maintained and prepared for the next units use, each unit will be inspected by the CACTAF support personnel on the date and time of departure.									
2. If a unit fails to conduct a pre-inspection, the unit takes full responsibility for the cleanliness and maintenance of the facility. Units that conduct a pre-inspection will report all pre-existing conditions to CACTAF support personnel.									
CLEARANCE STANDARDS									
GLOBAL TASKS								Pass	Fail
Entire facility policed, including 100 meters into the wood line									
All brass, trash, and residue, to include large branches, removed from the facility.									
Range support building swept, clean, and secure									
Mess area cleaned									
AAR swept and cleaned									
Parking area policed									
Bleacher Enclosure cleaned and serviceable									
Underground tunnel complex cleaned exhaust fan breaker off, and gate secured									
All HUTS, Smell generators, and smoke canisters accounted for									
BUILDING TASKS	Service	Bank	Office	Church	Police	Hotel	Business 2	Business 1	Warehouse
Entire building policed, including trash, brass, and large amounts of sand and/or dirt.									
Furniture restored to original configuration.									
All shutters secure									
Fire Extinguishers present and charged									
Access grates returned to original stow position									
Building secured									
Rooftop access hatches secured with snap link.	N/A			N/A					

Remarks:	
Unit:	OIC:
Date:	Inspector(s):

USASAFD Form 2230-R, 1 APR 22

Figure R-6. Rappel Master Certification Statement (USASAFD Form 2251-R)

OFFICE SYMBOL

DATE:

MEMORANDUM FROM:

MEMORANDUM FOR US Army Support Activity Fort Dix, Range Safety Officer

SUBJECT: Rappel Master Certification Statement

1. The following individual is a certified Rappel Master:

NAME

RANK

RANGE CARD#

2. They have read and fully understand all range and rappel operational requirements located in USASA Fort Dix Pam 350-3, all applicable publications, and will comply with all requirements.

Certifying Official Signature

Printed Name

Rank

Position of Certifying Official

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Figure R-7. Rappel Tower Safety Checklist (USASAFD Form 2252-R)

### RAPPEL TOWER SAFETY CHECKLIST

DATE: \_\_\_\_\_ UNIT: \_\_\_\_\_

1. The following Rappel Tower safety checks will be performed before beginning operations and any deficiencies that cannot be corrected by the unit will be reported to Range Control immediately when deficiencies cannot be corrected. Rappel operations will not begin until JB MDL, ASA Range Safety Office grants permission.

<u>ITEM</u>	<u>INITIAL</u>
a. Surface area adjacent to tower where rappellers will impact:	
(1) Are there any holes? If yes, fill them in.	_____
(2) Are there any foreign objects present? If yes, remove them.	_____
(3) Is there anything present posing a hazard to rappellers?	_____
b. General supporting structure of the tower:	
(1) Is there any structural damage?	_____
(2) If yes, will the damage endanger personnel utilizing facility?	_____
c. Stairs/Ladder leading to the top of the tower:	
(1) Is the structure sturdy?	_____
(2) Are any steps missing?	_____
(3) Are any steps slippery?	_____
(4) Are handrails present?	_____
(5) Will stairs/ladder support the weight of personnel?	_____
(6) Does the stairwell pose a danger to personnel?	_____
d. Rappel wall:	
(1) Is the lumber of the wall rotted?	_____
(2) Are any nails protruding from the wall?	_____
(3) Are any boards missing or gaps between boards where rappellers could get their foot caught?	_____
(4) Are there any hazards posing a danger to rappellers?	_____
e. Tower Platform:	
(1) Are any boards missing?	_____
(2) Are any boards rotted to where personnel could break through?	_____
(3) Is there anything present that may pose a tripping hazard?	_____

f. Anchor Points:

- (1) Are both primary and secondary anchor points present? \_\_\_\_\_
- (2) Primary and secondary anchor points independent of each other? \_\_\_\_\_
- (3) Are they secure enough to hold the rappellers? \_\_\_\_\_
- (4) Is padding present at each anchor point and will the padding prevent the ropes from contacting sharp edges? \_\_\_\_\_

2. Unit Pre-Operational checks:

a. Personnel requirements IAW USASAFD Pam 350-3:

- (1) Rappel OIC/NCOIC? \_\_\_\_\_
- (2) Rappel Master/RSO? \_\_\_\_\_
- (3) Rappel Lane NCO? \_\_\_\_\_
- (4) Belay Controller? \_\_\_\_\_
- (5) Belay Man? \_\_\_\_\_
- (6) Medic/CLS? \_\_\_\_\_

b. Safety Briefing:

- (1) All clothing and equipment will be secured at all times. Helmets with chin strap fastened and heavy-duty gloves will be worn at all times by rappellers.
- (2) Miles gear will not be worn during rappelling.
- (3) Rappel seats will be tied by the Soldier and inspected by rappel master before climbing the tower.
- (4) Rappellers will climb the tower only when directed by the OIC/Safety Officer. Only one person at a time will be on the ladder.
- (5) Rappellers will stay on the center of the tower until instructed to move to a rappelling point.
- (6) No more than two personnel will be behind each rappelling point.
- (7) All cadres on the tower will be secured with a safety line attached to an eyebolt on the floor.
- (8) No one will lean on or sit on the railings and banisters of the tower.
- (9) No one will be allowed within three feet of the edge of the tower without being secured unless moving to a hook up point.
- (10) All tower rappels will be done with a double rope. All personnel weighing more than 190 pounds will have two turns around the snap link (for a total of six ropes in the snap link). No slack rappels will be allowed.
- (11) While on the tower, all rappellers will maintain eye contact with the rappel master and take all directions from him/her.
- (12) The rappel master will check all rappellers prior to descent.
- (13) Rappellers will ensure they have a belay man on their rope before descent.
- (14) Individuals will not rappel before yelling, "ON RAPPEL," and receiving back from the belay man, "ON BELAY."

(15) The belay man will not wear gloves but will wear a helmet. The belay man will keep both hands on the rope and always keep their head and eyes on the rappellers.

(16) There will be no running on the tower, no eating, drinking, or smoking on or near the tower. (Point out the designated smoking point)

(17) The OIC/Safety Officer will explain procedures for entanglements, freezing on the rope, and other potential problems than can occur.

c. Equipment:

(1) Rappelling Rope (at least 120' in length, 4,500 lbs tensile strength nylon, 7/16th in diameter, 3 strand, multi-filament twisted rope with a right hand lay). \_\_\_\_\_

(2) Snap link (steel, non-locking, mountain piton, 2,000 lbs. capacity with gate closed; snap links must be checked for spring pressure, proper locking, rust, nicks, burrs, lateral gate movement, and pressure of gate pin). \_\_\_\_\_

(3) Gloves, leather workman and wool inserts (must be inspected for holes or tears in friction bearing surfaces, rips, or tears in seams and present of any petroleum products). \_\_\_\_\_

(4) Sling rope used to construct rappelling and Australian rappel seats must be twelve to fifteen foot in length. \_\_\_\_\_

(5) Rappelling ropes and sling ropes must be checked for excessive wear, cuts exceeding ½ of one strand, fraying, mildew, presence of petroleum products, and any disruption in the strands of the right hand lay of the rope. \_\_\_\_\_

(6) Organizational helmets will be equivalent to the Army Combat Helmet (ACH) with proper suspension or padding and chin strap. \_\_\_\_\_

(7) All ropes, snap links, and gloves found unserviceable are marked, segregated, and cannot be used for rappelling. \_\_\_\_\_

d. Anchor Points:

(1) Two or more independent anchor points will be used for all rappelling and should be able to withhold 3,000 lbs. \_\_\_\_\_

(2) All end of line anchor knots must be a bowline with a half-hitch and there will be a middle of rope anchor knot on each set of rappel ropes. \_\_\_\_\_

(3) All rappelling is done with two ropes. \_\_\_\_\_

(4) When snap links are used for attaching the rappel ropes to an anchor point, they are installed in pairs on each anchoring knot with the gates of the two-snap links opposite one another and both gates opening away from the knot. \_\_\_\_\_

3. Unit during operational checks:

a. Rappelers preparation:

(1) Rappelers must tuck in/secure shirt tails, loose clothing, equipment straps, and long hair to ensure these items do not get caught in the snap link and sleeves are worn down. \_\_\_\_\_

(2) Miles equipment will not be worn during rappelling. \_\_\_\_\_

- (3) Helmet chin straps will be fastened during all rappelling operations. \_\_\_\_\_
- (4) Leather workman gloves with inserts must be worn when rappelling. \_\_\_\_\_
- (5) Rappel seats must be secured with a square knot and two over-hand knots. \_\_\_\_\_
- Tails are secured in the rappellers pockets. \_\_\_\_\_
- (6) Rappelers will remove all jewelry, i.e., necklaces, rings, etc. prior to any rappelling operations. \_\_\_\_\_
- (7) Rappelers will have their ID cards and ID tags in their possession during all rappel operations. \_\_\_\_\_
- (8) Rappelers will receive a safety briefing prior to all rappel operations. \_\_\_\_\_
- (9) Rappelers will be inspected by rappel master prior to each rappel. \_\_\_\_\_
- (10) When rappelling with equipment, LBE or LBV should be unfastened in the front or fastened loosely behind the back of the rappellers. The rucksack should be worn high and tight on the back of the rappellers to allow the brake hand to reach the small of the back. Rucksack adjustment straps will be tied across the chest or tucked away. \_\_\_\_\_
- (11) The rappellers weapon will be slung diagonally across the back, muzzle down near hip on guide hand side, with the weapons butt stock on the brake hand side near the shoulder. \_\_\_\_\_

b. Tower rappelling:

- (1) All cadres on the tower must be secured with a safety line or monkey harness at all times. \_\_\_\_\_
- (2) All cadres must have in their possession a knife capable of cutting rappelling ropes in the event rappellers become entangled. \_\_\_\_\_
- (3) Rappelling ropes must be of sufficient length to reach the ground with an additional ten feet on the ground. \_\_\_\_\_
- (4) There must be a rappel Lane NCO at each point on the tower to hook up and coach rappellers during the rappel. \_\_\_\_\_
- (5) There must be a belay controller for every four ropes. \_\_\_\_\_
- (6) There must be a belay man on each rappel rope. Belay men will wear a helmet and no gloves. \_\_\_\_\_
- (7) Cadre must not permit rappellers to rappel without a verbal statement of, "on belay," from the belay man. \_\_\_\_\_
- (8) There must be a recovery rope available on the tower in case rappellers become entangled during their decent. \_\_\_\_\_
- (9) After each rappel, the rappellers must un-tie, re-tie, and be re-inspected before conducting another rappel. \_\_\_\_\_

OIC NAME: \_\_\_\_\_ RSO NAME: \_\_\_\_\_

RANK: \_\_\_\_\_ RANK: \_\_\_\_\_

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

Figure R-8. CS Chamber Qualification Statement (USASAFD Form 2258-R)

OFFICE SYMBOL

DATE:

MEMORANDUM FROM:

MEMORANDUM FOR US Army Support Activity Fort Dix, Range Safety Officer

SUBJECT: CS Chamber Qualification Statement

1. The following individual is certified to run the CS Chamber (HF-11) at US Army Support Activity Fort Dix:

NAME

RANK

RANGE CARD#

2. The above-named individual has been trained and is authorized to operate the CS Chamber by virtue of:

\_\_\_\_\_ Branch /MOS of 74A or 74D

\_\_\_\_\_ Attended accredited CBRN Defense School:

Location: \_\_\_\_\_ Date: \_\_\_\_\_

3. They have read and fully understand all range and CS Operational requirements located in USASAFD Pam 350-3, applicable chemical training operation publications, and will comply with all requirements.

Certifying Official Signature

Printed Name

Rank

Position of Certifying Official

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Figure R-9. CS Chamber Safety Checklist (USASAFD Form 2259-R)

CS CHAMBER SAFETY CHECKLIST (HF-11)

DATE: \_\_\_\_\_ UNIT: \_\_\_\_\_

<u>ITEM</u>	<u>INITIAL</u>
1. OIC/RSO signed the Qualification Statement, Annex 2?	_____
2. Combat Lifesaver or qualified medical personnel on site?	_____
3. OIC has observed the wind direction, speed and potential downwind hazards prior to charging the chamber?	_____
4. Operational Checks:	
a. OIC/RSO checked the medical support personnel masks for serviceability prior to beginning CS operations.	_____
b. A 5-gallon container of water is readily available for decontamination.	_____
c. Only CS capsules or CS powder is used in the chamber.	_____
d. An individual is positioned at the entrance and exit to assist entry and exit.	_____
e. Two personnel operating inside chamber; OIC or RSO must be present.	_____
f. Each mask is checked for serviceability prior to entering chamber.	_____
g. Repair parts are on hand to perform operator/organizational maintenance.	_____
h. Personnel entering chamber have been screened for profiles and medical problems prior to entering.	_____
i. Personnel are not subjected to CS exposure unnecessarily.	_____
j. No more than ten personnel authorized in the chamber at any time.	_____
k. Chamber initially charged with no more than six CS capsules or 1 to 1 ½ teaspoons of CS powder?	_____
l. No more than one capsule or 1 to ¼ teaspoons of CS powder is used to recharge the chamber.	_____
m. Personnel leaving the chamber are escorted out of the chamber and directed upwind, told to unmask, face into the wind, open their eyes but do not rub them. Personnel are also informed to shower with cool water initially then warm soapy water when they bathe.	_____
n. Only one door is opened at any time during operations.	_____

5. Clearing the CS Chamber:

- a. OIC/RSO checks inside the chamber for excess concentration/buildup of CS? \_\_\_\_\_
- b. OIC/RSO checks wind speed and direction for possible downwind hazards prior to aeration. Particular attention must be given to exposing Range Road to significant concentrations; Range Road is a shared thoroughfare with the State of New Jersey and is travelled by non-affiliated personnel. \_\_\_\_\_
- c. Upon completion of the exercise, **BEFORE AERATION**, notify Range Control and wait until a Range Control representative arrives to authorize aeration of the chamber. Options for aeration are:
  - (1) Not to aerate.
  - (2) Wait to aerate.
  - (3) Open one door for a short period; shut the door, reopen, etc., releasing small amounts of CS at a time.
  - (4) Open both doors and aerate the Chamber.
- d. Range Control will conduct a joint inspection of the CS Chamber and training area prior to releasing the unit.

OIC NAME: \_\_\_\_\_

RANK: \_\_\_\_\_

Signature: \_\_\_\_\_



# **USASA Fort Dix**

## **Crew / Aerial Gunnery Facilities**

### **Requirements**

#### **Home to America's Reserve Force Enablers**

The installation of choice for the Reserve Components committed to providing unparalleled installation support, training, and customer service to America's fighting Reserve

Range 65 and 85 are the facilities that support Crew / Aerial gunnery for M2, M249, M240 and MK 19\* weapon systems. Attached is the information to create and submit a Gunnery Table / Shot sheet or Conop for RG 65/ 85. Please have this, and a proper risk management submitted no later than,

**10 DAYS PRIOR TO TRAINING START DATE.**

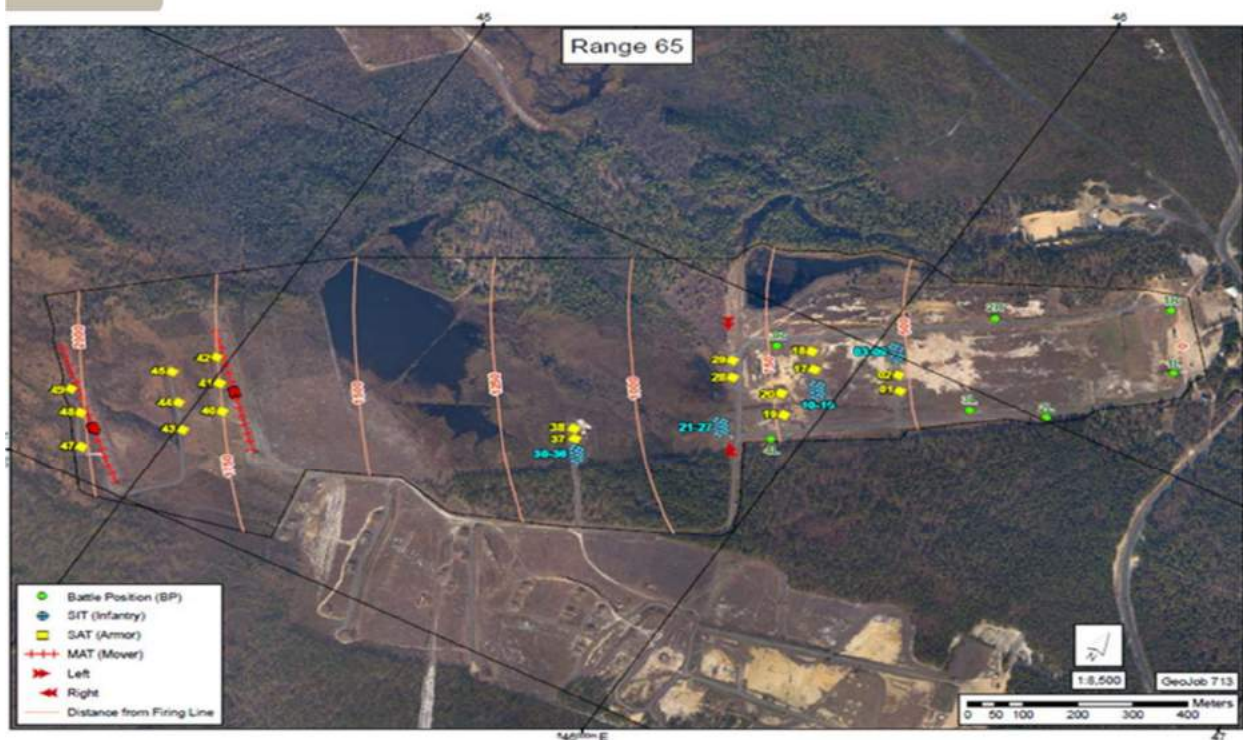
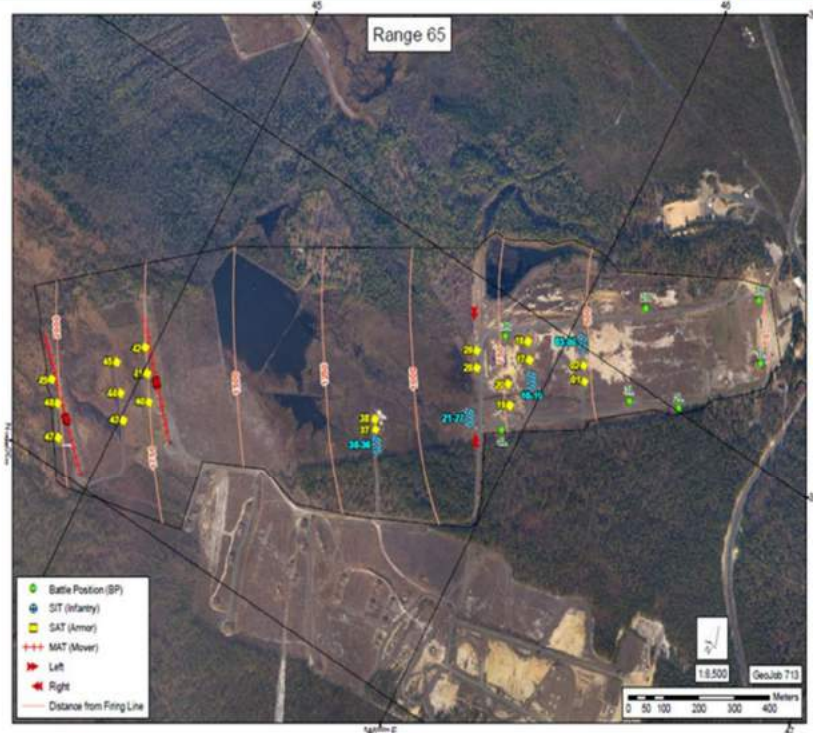


## Range 65



### • Capabilities

- 2 course lanes.
- 7 Defensive Battle Positions.
- Capable of qualification for multiple CPP platforms.
- 22 infantry and 21 armored targets.
- Ranges up to 2000m.
- Throughput averages 15-25 iterations.





# RG 65 TARGET AVAILABILITY W/RANGES by POSITION

TARGET TYPE and ID	LEFT SIDE				RIGHT SIDE		
	BP1L	BP2L	BP3L	BP4L	BP1R	BP2R	BP3R
SAT 201	539	NA	NA	NA	NA	NA	NA
SAT 202	541	NA	NA	NA	NA	NA	NA
SIT (GP 1) 203 - 209	542	NA	NA	NA	513	NA	NA
SIT (GP 2) 210 - 216	709	NA	NA	NA	NA	NA	NA
SAT 217	710	NA	NA	NA	735	NA	NA
SAT 218	715	NA	NA	NA	736	394	NA
SAT 219	775	513	364	NA	NA	NA	NA
SAT 220	775	525	374	NA	NA	NA	NA
SIT (GP 3) 221 - 227	914	646	496	NA	NA	NA	NA
SAT 228	927	NA	NA	NA	896	NA	NA
SAT 229	957	NA	NA	NA	1197	832	NA
SIT (GP 4) 230 - 236	1197	NA	541	390	NA	NA	NA
SAT 237	1190	929	781	382	NA	NA	NA
SAT 238	1195	927	774	388	NA	NA	NA
MAT 239	1839	1571	759	1032	1850	1501	1069
SAT 240	1884	1616	1423	1077	1995	1646	1214
SAT 241	1884	1616	1468	1077	1995	1646	1214
SAT 242	1884	1616	1468	1077	1995	1646	1214
SAT 243	1957	1689	1541	1150	1995	1619	1187
SAT 244	1957	1689	1541	1077	1995	1619	1187
SAT 245	1957	1689	1541	1077	1995	1619	1187
MAT 246	2098	1830	1682	1291	2109	1760	1328
SAT 247	2139	1871	1723	1332	2184	1853	1403
SAT 248	2139	1871	1723	1332	2184	1853	1403
SAT 249	2139	1871	1723	1332	2184	1853	1403

SIT = Stationary Infantry Target  
SAT = Stationary Armor Target  
MAT = Moving Armor Target  
GP 1/2/3/4 = SIT Clusters  
BP 1/2/3/4 L = Battle Positions Left Side of Range  
BP 1/2/3 R = Battle Positions Right Side of Range



## Gunnery

Unit: \_\_\_\_\_  
Range: 65 \_\_\_\_\_  
Weapon System(s): \_\_\_\_\_

Doctrinal Reference: \_\_\_\_\_  
Table: \_\_\_\_\_  
Day/Night: \_\_\_\_\_

STEP #	CREW MEMBER ENGAGING	QV POSTURE / ALTITUDE	VEHICLE POSITION FROM LEFT LANE	TASK NUMBER COMPLETED	LEFT LANE TARGET S & DISTANCE	ALT TARGET LEFT LANE	REMARKS (TARGET Type / Exposure Time / Script Instructions)	VEHICLE POSITION FROM RIGHT LANE	RIGHT LANE TARGETS & DISTANCE	ALT TARGET RIGHT LANE
DAY ENGAGEMENT										
NIGHT ENGAGEMENT/LIMITED VISIBILITY (TYPE OF NIGHT VISION DEVICE _____)										





## Range 85



### • Capabilities

- 2 course lanes.
- 5 Defensive Battle Positions.
- Capable of qualification for multiple CPP platforms.
- 15 infantry and 24 armor targets.
- Ranges up to 1500m.
- Throughput averages 15-25 iterations.





# RG 85 TARGET AVAILABILITY W/RANGES by POSITION

TARGET TYPE and ID	LEFT SIDE			RIGHT SIDE		
	BP1L	BP2L	HBP3L	BP1R	BP2R	BP3R
SAT 1	535m	320m	NA	NA	NA	NA
SAT 2	530m	315m	NA	590m	NA	NA
SIT (GP 1) 3 - 7	535m	320m	135m	575m	360m	NA
SAT 8	545m	330m	145m	565m	345m	NA
SAT 9	550m	340m	160m	560m	335m	NA
SAT 10	655m	440m	270m	715m	500m	NA
SAT 11	660m	440m	265m	700m	480m	NA
SAT 12	660m	450m	265m	690m	465m	250m
SAT 13	710m	490m	310m	745m	520m	305m
SAT 14	715m	500m	320m	735m	510m	285m
MAT 15	765m	565m	385m	780m	540m	325m
SAT 16	825m	610m	425m	830m	600m	370m
SAT 17	810m	595m	420m	860m	640m	430m
SIT (GP 2) 18 - 22	920m	705m	535m	975m	755m	545m
SAT 23	925m	705m	530m	965m	745m	525m
SAT 24	955m	740m	560m	990m	770m	545m
SAT 25	930m	710m	530m	955m	730m	500m
SAT 26	965m	750m	565m	980m	750m	520m
SIT (GP 3) 27 - 31	935m	720m	535m	945m	715m	485m
SAT 32	1290m	1080m	895m	1310m	1080m	850m
SAT 33	1240m	1030m	850m	1270m	1040m	810m
MAT 34	1220m	1000m	830m	1270m	1040m	835m
SAT 35	1250m	1040m	865m	1290m	1070m	840m
SAT 36	1410m	1190m	1020m	1450m	1230m	1000m
SAT 37	1410m	1190m	1020m	1440m	1220m	990m
SAT 38	1410m	1200m	1020m	1440m	1210m	980m
SAT 39	1410m	1200m	1020m	1440m	1210m	975m

SIT = Stationary Infantry Target  
SAT = Stationary Armor Target  
MAT = Moving Armor Target  
GP 1/2/3 = SIT Clusters (Group)  
BP 1/2 L = Battle Positions Left Side of Range  
HBP3L = Hasty Battle Position Left Side of Range  
BP 1/2/3 R = Battle Positions Right Side of Range



## Gunnery

Unit: \_\_\_\_\_  
Range: 85 \_\_\_\_\_  
Weapon System(s): \_\_\_\_\_

Doctrinal Reference: \_\_\_\_\_  
Table: \_\_\_\_\_  
Day/Night: \_\_\_\_\_

STEP #	CREW MEMBER ENGAGING	QV POSTURE / ALTITUDE	VEHICLE POSITION FROM LEFT LANE	TASK NUMBER COMPLETED	LEFT LANE TARGET S & DISTANCE	ALT. TARGET LEFT LANE	REMARKS ( TARGET Type / Exposure Time / Script Instructions )	VEHICLE POSITION FROM RIGHT LANE	RIGHT LANE TARGETS & DISTANCE	ALT TARGET RIGHT LANE
DAY ENGAGEMENT										
NIGHT ENGAGEMENT/LIMITED VISIBILITY ( TYPE OF NIGHT VISION DEVICE _____ )										



Figure R - 11, USASAFD Form 2270-R (Ruck March Request)

STRIP MAP REQUIREMENTS		UNIT POC: _____		JB MCGUIRE/DIX/LAKEHURST NEW JERSEY ROAD MARCH STRIP MAP	
For all vehicle/foot marches of approximately three miles or greater length, e.g., cantonment area to the ranges will complete a request.		PHONE #: _____		UNIT: _____	
-For troop movement in the cantonment area, all units will march on the right shoulder of the street or road, with the flow of traffic. Units should get off the street whenever possible so as not to interfere with the flow of traffic.		START POINT: _____		DATE: _____	
-A minimum of one hand-held radio will be present, the frequency will be set to Channel-1 Range Control Net. The radio will be used to notify Range Control of Start Point (SP) departure/Release Point (RP) completion and any emergency requests.		RELEASE POINT: _____		For use of this form, see ASA Dix Pam 350-3, Range Guide and ASA Dix Reg 350-3, Policies and Procedures. Procedures listed on this form and in ASA Dix Pam 350-3 do not negate the requirements in FM 21-20 and FM 21-18.	
-Operations under black out conditions are restricted to tank trails and dirt surface roads within the TAC areas. An overlay of the convoy route will be turned in to Range Safety 10 days prior in order to coordinate with DOD Police. The overlay will list SP/RP/Checkpoints, type and number of vehicles in convoy, and start time with projected end time. Vehicles will maintain a speed of 5-10 MPH with an interval distance of 60-100 feet.		START TIME: _____		 <p>USASA Fort Dix Form 2070, 1 June 2010 This Form Supersedes FDGC Form 2070, 1 May 1996</p>	
-Ambush sites will be indicated with scheduled times. Units will request approval for the use of pyrotechnics and smoke during ambushes from Range Safety Office.		END TIME: _____			
-All entries on strip map will be completed by units with the route of March highlighted. A copy will be retained by the unit.		CALL SIGN: _____			
		#PERSONNEL: _____			
		#VEHICLES: _____			
		AMBUSH SITES: 1. _____			
		2. _____			
		3. _____			
		<b>FOR EMERGENCIES</b> <b>CONTACT RANGE CONTROL</b> <b>609-562-4600</b> <b>MOTOROLA RADIO CHANNEL-1</b>			

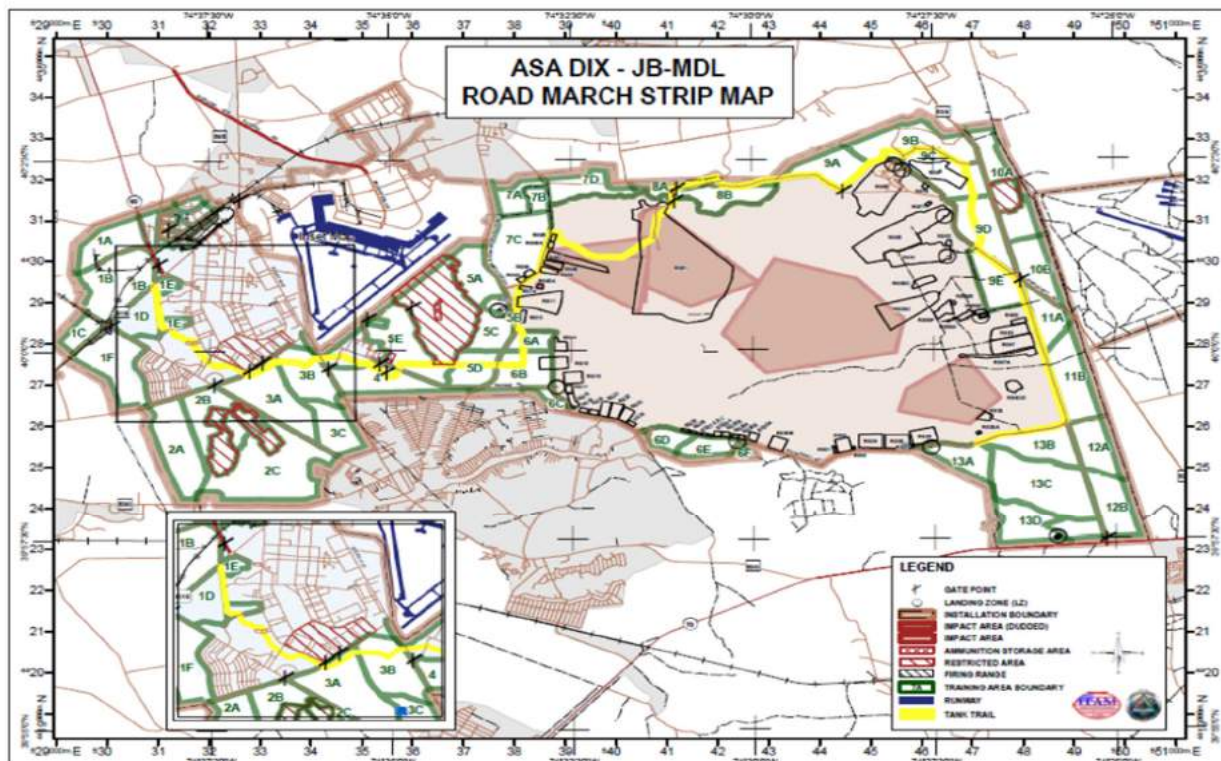


Figure R-12. Artillery Safety Card/Fan (USASAFD Form 2254-R)

**F - 6. Artillery Safety Card/Fan**

UNIT: \_\_\_\_\_

OIC: \_\_\_\_\_

DATES OF FIRING: \_\_\_\_\_

ARTILLERY NOMENCLATURE: \_\_\_\_\_

ARTILLERY FIRING POINT: \_\_\_\_\_

ORDNANCE DODIC & NOMENCLATURE: \_\_\_\_\_

MAXIMUM CHARGE: \_\_\_\_\_

MAXIMUM RANGE: \_\_\_\_\_ MINIMUM RANGE: \_\_\_\_\_

MAXIMUM ORDNANCE ELEVATION IN FEET: \_\_\_\_\_

(HEIGHT MAY NOT EXCEED 8,000 feet)

<u>CHARGE</u> /	<u>MAXIMUM</u> <u>ELEVATION</u> /	<u>FUZE</u> /	<u>TIME</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

LEFT LIMIT  
AZIMUTH \_\_\_\_\_  
DEFLECTION \_\_\_\_\_

RIGHT LIMIT  
AZIMUTH \_\_\_\_\_  
DEFLECTION \_\_\_\_\_

FIRING POSITION GRID COORDINATES: \_\_\_\_\_

MOUNTING AZIMUTH: \_\_\_\_\_ REFERRED DEFLECTION: \_\_\_\_\_

(FRONT)

**USASAFD Form 2254-R, 1 Nov 2010**

Separate Safety Fan will be prepared for each Firing Position



MAXIMUM ORD: \_\_\_\_\_ (FEET)

MAXIMUM RANGE: \_\_\_\_\_ (METERS)

MOUNTING AZIMUTH: \_\_\_\_\_

A diagram of a safety fan, which is a trapezoidal shape representing a field of fire. It is divided into four quadrants by a vertical line and a horizontal line. The horizontal line is labeled "REFERRED DEFLECTION" in the center. The left side of the fan is labeled "L \_\_\_\_\_ Mils" and the right side is labeled "R \_\_\_\_\_ Mils". At the bottom left, it says "LEFT LIMIT AZIMUTH: \_\_\_\_\_ DEFLECTION: \_\_\_\_\_". At the bottom right, it says "RIGHT LIMIT AZIMUTH: \_\_\_\_\_ DEFLECTION: \_\_\_\_\_". At the bottom center, it says "MINIMUM RANGE: \_\_\_\_\_ (METERS)".

L \_\_\_\_\_ Mils

R \_\_\_\_\_ Mils

REFERRED DEFLECTION

\_\_\_\_\_

LEFT LIMIT  
AZIMUTH: \_\_\_\_\_  
DEFLECTION: \_\_\_\_\_

RIGHT LIMIT  
AZIMUTH: \_\_\_\_\_  
DEFLECTION: \_\_\_\_\_

MINIMUM RANGE: \_\_\_\_\_ (METERS)

(BACK)

**USASAFD Form 2254-R, 1 Nov 2010**  
Separate Safety Fan will be prepared for each Firing Position

Figure R-13. Mortar Safety Card/Fan (USASAFD Form 2255-R)

**F - 7. Mortar Safety Card/Fan**

UNIT: \_\_\_\_\_

OIC: \_\_\_\_\_

DATES OF FIRING: \_\_\_\_\_

MORTAR NOMENCLATURE: \_\_\_\_\_

MORTAR FIRING POINT: \_\_\_\_\_

ORDNANCE DODIC & NOMENCLATURE: \_\_\_\_\_

MAXIMUM CHARGE: \_\_\_\_\_

MAXIMUM RANGE: \_\_\_\_\_ MINIMUM RANGE: \_\_\_\_\_

MAXIMUM ORDNANCE ELEVATION IN FEET: \_\_\_\_\_

(HEIGHT MAY NOT EXCEED 8,000 feet)

<u>CHARGE</u> /	<u>MAXIMUM</u> <u>ELEVATION</u> /	<u>FUZE</u> /	<u>TIME</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

LEFT LIMIT  
AZIMUTH \_\_\_\_\_  
DEFLECTION \_\_\_\_\_

RIGHT LIMIT  
AZIMUTH \_\_\_\_\_  
DEFLECTION \_\_\_\_\_

FIRING POSITION GRID COORDINATES: \_\_\_\_\_

MOUNTING AZIMUTH: \_\_\_\_\_ REFERRED DEFLECTION: \_\_\_\_\_

(FRONT)

**USASAFD Form 2255-R, 1 Nov 2010**

Separate Safety Fan will be prepared for each Firing Position

MAXIMUM ORD: \_\_\_\_\_ (FEET)

MAXIMUM RANGE: \_\_\_\_\_ (METERS)

MOUNTING AZIMUTH: \_\_\_\_\_

L \_\_\_\_\_ Mils

R \_\_\_\_\_ Mils

REFERRED DEFLECTION

\_\_\_\_\_

LEFT LIMIT  
AZIMUTH: \_\_\_\_\_  
DEFLECTION: \_\_\_\_\_

RIGHT LIMIT  
AZIMUTH: \_\_\_\_\_  
DEFLECTION: \_\_\_\_\_

MINIMUM RANGE: \_\_\_\_\_ (METERS)

(BACK)

**USASAFD Form 2255-R, 1 Nov 2010**  
 Separate Safety Fan will be prepared for each Firing Position

Figure R-14. SDZ Info Sheet (USASAFD Form 2256-R)

Indirect Fire Data	
Ammunition:	
DODIC:	
Target Location: MGRS	
MIN target left:	
MAX target left:	
MIN target right:	
MAX Target right:	
Firing Position:	
Probable errors:	
Range in Meters:	
Deflection in Meters:	
Charge:	
Type:	
Amount:	

Figure R-15. Mk-19 Cleanup Agreement (USASAFD Form 2257-R)

IMDI-PLT-R

DATE:

MEMORANDUM of Agreement Between: USASAFD Range Services Division and

---

1. The plan to conduct cleanup of Automated Range \_\_\_\_ after Mk 19 Gunnery Qualification.
2. The \_\_\_\_\_ will conduct cleanup on \_\_\_\_\_ beginning at \_\_\_\_\_. Mr. Leffers will conduct the safety briefing beginning at \_\_\_\_\_.
3. Failure to conduct cleanup is cause for Decertification and unit's loss of utilization of automated ranges.
4. POC is the undersigned at 609-562-4641, [jerome.a.leffers.civ@army.mil](mailto:jerome.a.leffers.civ@army.mil)

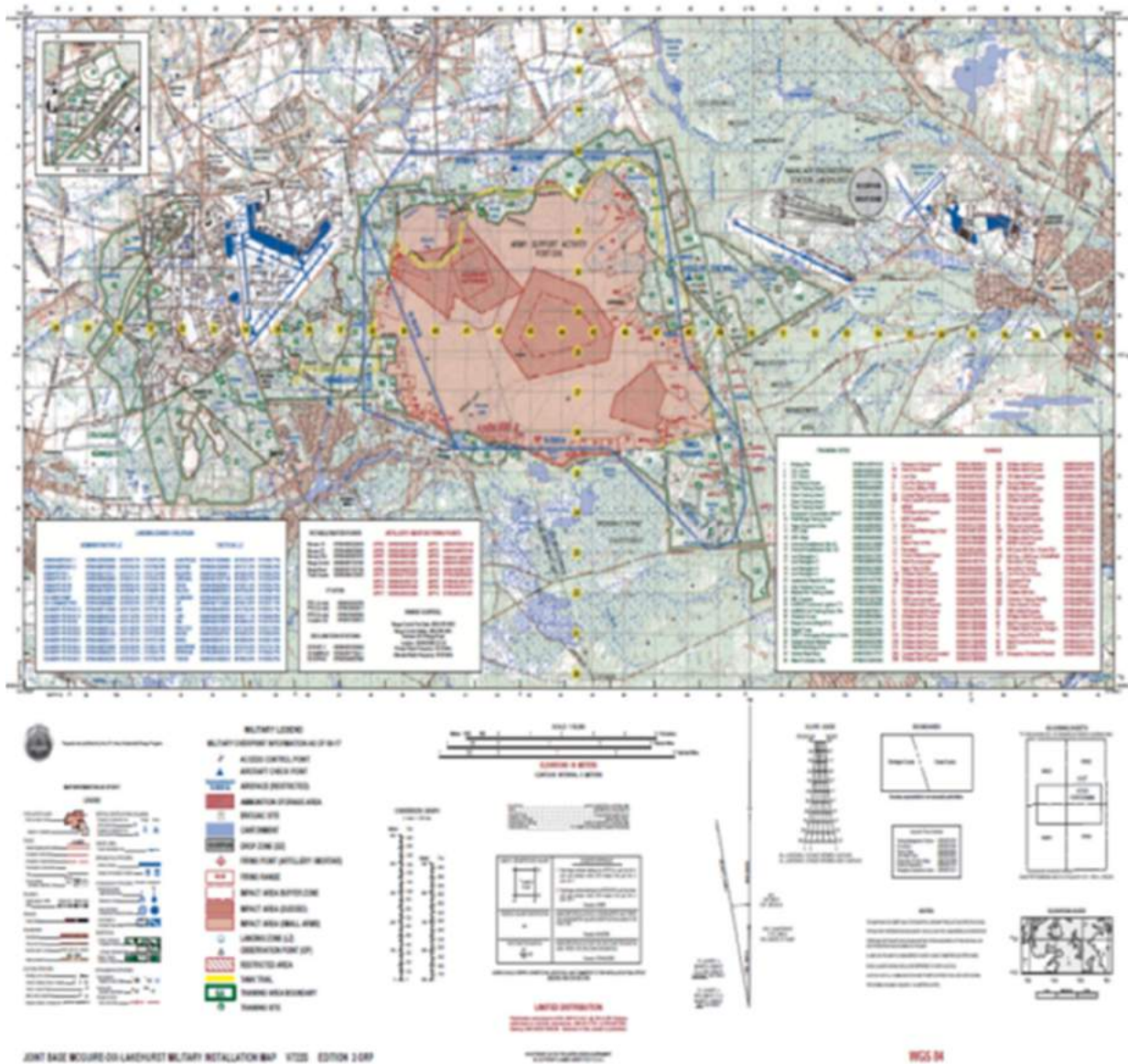
JEROME A. LEFFERS  
Range Safety Officer  
USASFD

USASAFD Form 2257 - R

## Appendix S Locator Map







## Appendix T

### Range Complex Telephone Directory

#### T-1. Dialing Instructions

- a. The USASAFD Commercial Numbers are Area Code (609) 562-XXXX; the USASAFD DSN is 562-XXXX. 87th Air Base Wing (87 ABW) Commercial Numbers are Area Code (609) 754-XXXX; the 87 ABW DSN is 754-XXXX.
- b. When using a call box phone in the Training Complex, dial 562 then the extension, i.e., 562-4600 to contact Range Control Firing Desk in an Emergency.
- c. Telephones throughout the Training Complex are class C lines and will not allow you to make long distance, credit card, or collect calls. If you require phone service to call home station, you can come to Range Control, Building 9011 Range Road to use the Class A lines. To make a Class A call, dial:
  1. Local numbers dial 97 then the six-digit number
  2. DSN other than JB MDL dial 98 then the six-digit number
  3. Long distance dial 99 then the nine-digit number
- d. All telephones are for official military business and are not cleared for classified information.

#### T-2. Fax and Reproduction Services

- a. Organizations may utilize the fax machine at Range Control to receive or send; the number is 609-562-2441.
- b. Copies can be made, in limited quantities, at the Range Control Firing Desk in Building 9011, Range Road or Training Division Building 5513 Texas Avenue.

**Table T-1. Range Phone Directory**

<b>RANGE CONTROL STAFF</b>		
<b>24 Hour Emergencies</b>	<b>4600</b>	
Range Firing Desk	4600 / 4650	
Range Officer	4640	
Range Safety Officers	4641 / 4643	
Range Operations Officer	4652	Fax 2441
Range Support Supervisor	4689	
Training Coordinator	4672	
Air Operations	4688 / 3451	
Q. A. Representative	4552	

<b>OTHER USASAFD AGENCIES</b>		
Training Division (TD)	2001 / 2002 / 2003	Fax - 5341
Lead Training Coordinator	2389	
TD Medical Officer	2428	
Installation Ammunition Manager	6248	
Training Administrator (RFMSS Accounts)	7358	
ITAM Coordinator	2917	

SRP Geographer	3953
Training Support Center (TSC)	3340
Troop Billeting	4704
Ammunition Supply Point (ASP)	3850
87th Security Forces Squadron	754 - 6001
Weather Line	4328
Operator	1011

BIVOUAC AREAS					
Bivouac 1	4601	Bivouac 9	4609	Bivouac 17	4617
Bivouac 2A	4602	Bivouac 10	4610	Bivouac 18A	4618
Bivouac 2B	4682	Bivouac 11	4611	Bivouac 18B	4698
Bivouac 3A	4603	Bivouac 11A	4578	Bivouac 19	4619
Bivouac 3B	4683	Bivouac 11B	4686	Bivouac 20	4620
Bivouac 4A	4604	Bivouac 11C	4685	Bivouac 21	4621/8114
Bivouac 4B	4695	Bivouac 12A	4684	Bivouac 22	4622
Bivouac 4C	4696	Bivouac 12B	4692	Bivouac 22A	4691
Bivouac 5	4605	Bivouac 12C	4612	Bivouac 24	3567
Bivouac 6	4606	Bivouac 13	4613	Brindle A	4675
Bivouac 7	4577	Bivouac 13A	4693	Brindle B	4670
Bivouac 8	4608	Bivouac 15	4615	Brindle C	8509
Bivouac 8A	4697	Bivouac 16	4616		

RANGES & ARTILLERY FIRING POINTS					
Range 3A	4677	Range 22	4522	Range 38	4538
Range 3B	8502	Range 23	4523	Range 39A	4594
Range 4	8405	Range 24	4524	Range 39B	4539
Range 6A	4506	Range 25	4525	Range 47A	4548
Range 6B	4596	Range 26	4526	Range 47B	4547
Range 7	4507	Range 27A	4501	Range 53	4553
Range 8	4508	Range 27B	4502	Range 55	4555
Range 9	4509	Range 27C	4527	Range 59A	8101
Range 10	4510	Range 28A	4528	Range 59B	4556 /8401
Range 11	4511	Range 28B	4570	Range 59C	4658 /4659
Range 12	4512	Range 29A	4529	Range 59D	4559/4591
Range 13	4513	Range 29B	4667	Range 59E	4549/4551
Range 14	4514/4676	Range 30A	4530	Range 59F	8411/8412
Range 15	4515	Range 30B	4593	Range 61	4561
Range 16	4516	Range 31	4531	Range 63	4563
Range 17	4517	Range 32	4532	Range 65	4565
Range 18A	4518	Range 33	4533	Range 71	4571
Range 18B	8118	Range 34	4534	Range 75	4575
Range 19	4519	Range 35	4535	Range 85	4585
Range 20	4520	Range 37	4537	Range 86	4586

Range 21	4521	AFP 1	4668	Range EOD	4589
AFP 4-8-9	4634	AFP 6-7	4636	AFP 13	4633
AFP 14	4639	AFP 15	4505	AFP 17	8117

SPECIAL TRAINING SITES			
DTA 2	3108	Obstacle Course	2376
DTA 3	3208	Heavy Equip TA	4648
DTA 4	4678	Small Wash Facility 8301	2569
DTA 5	4679	Large Wash Facility 8604	3673

BUILDINGS	
Building 7410 (CTT Site)	4542
Building 7411 (CTT Site)	3190
Building 7413 (CTT Site)	2871
Building 7415 (CTT Site)	8557
Building 7419 (CTT Site)	8556
Building 7420 (CTT Site)	8532
Building 7464 (IR Site 3C)	5194 / 7247
Building 8673 (HF-11)	5266
Building 8674 (HF-11)	6590
Building 9131 (Range 3A)	4503
Building 9142 (Range 5A)	4680
Building 9185 (Range 5)	4690
Building 9194 (Range 13)	4107
Building 9221 (Range 85)	4564 / 4566
Building 9261	4573 / 4590
Building 9305 (Range 65)	4655
Building 9409A	7282
Building 9456 (Range 59C)	8406
Building 9471 (Range 47)	4694
Building 9481 (Range 59B)	4137
Building 9525 (Times Square)	6589
Building 9605 (COL Liberty)	6800 / 6808
Building 9614 (COL Liberty)	4367 / 4368
Building 96158 (COL Victory - Mayor Cell)	6940 / 6941
Building 9620 (TAC 12A)	4624
Building 9650 (IR Site TAC 12C)	4627 / 4668
Building 9727 (Range 34)	4534
Building 9758	4538
Building 9849A (Range 29B)	4667
Building 9850 (Range 27A)	4502
Building 9862 (Range 30B)	4625
Building 9977 (Range 1 - CECOM - Safety)	8102
Building 9984 (Range 1 - CECOM - Facility Staff Support)	8414

## **Glossary**

### **Section I Abbreviations/Acronyms**

**AAR** - After Action Review/After Action Report  
**AFP** - Artillery Firing Point  
**AC** - Active Component  
**ADOS** - Active Duty for Special Operations  
**ADT** - Active Duty for Training  
**ARDC** - U.S. Army Armament Research and Development Center  
**ASP** - Ammunition Supply Point  
**AT** - Annual Training  
**BA** - Battle Assembly  
**BAT** - Battle Assembly Training  
**BIV** - Bivouac  
**BOM** - Bills of Materials  
**BOMARC** - Missile system developers; Boeing and Michigan Aerospace Research Center  
**CONOP** - Concept of Operation  
**COL** - Contingency Operating Location  
**DODAAC** - Department of Defense Activity Address Code  
**DOL** - Directorate of Logistics  
**DPTMS** - Directorate of Plans, Training, Mobilization and Security  
**DS** - Direct Support  
**DSN** - Defense System Network  
**ENRD** - Environmental/Natural Resources Division  
**FAA** - Federal Aviation Administration  
**FOB** - Forward Operating Base  
**GIS** - Geographic Information System/Geospatial Information System  
**GS** - General Support  
**HAZCOM** - Hazardous Communication/Right to Know  
**HAZMAT** - Hazardous Material  
**IMSA** - Installation Medical Supply Activity  
**ITAM** - Integrated Training Area Management  
**IRC** - Installation Related Construction  
**JSIIDS** - Joint Service Interior Intrusion Detection System  
**KACH** - Keller Army Community Hospital at West Point  
**LEWTAQ** - Law Enforcement Weapons Training and Qualification  
**LOD** - Line of Duty  
**LOFA** - Letter of Funding Authority  
**LOGEX** - Logistics Exercise  
**MACOM** - Major Command  
**METL** - Mission Essential Task List  
**MFP** - Mortar Firing Point  
**MIPR** - Military Interdepartmental Purchase Request (DD Form 448)

**MOBEX** - Mobilization Exercise  
**MPH** - Miles per Hour  
**MSL** - Mean Sea Level  
**NCOIC** - Non-Commissioned Officer in Charge  
**NEC** - Network Enterprise Center  
**NLT** - No Later Than  
**OIC** - Officer in Charge  
**PCF** - Practitioners Credential Files  
**PMCS** - Preventive Maintenance Checks and Services  
**POC** - Point of Contact  
**POV** - Privately Owned Vehicle  
**PPR** - Prior Permission Required  
**PAO** - Public Affairs Officer  
**RC** - Reserve Component  
**RETS** - Remote Electronic Target System  
**RFMSS** - Range Facility Management Support System  
**RRC** - Regional Readiness Command/Regional Reporting Center  
**RSO** - Range Safety Officer  
**POL** - Petroleum, Oil and Lubricants  
**ROTC** - Reserve Officer Training Corps  
**SIPRNET** - SECRET Internet Protocol System  
**SOP** - Standard Operating Procedures  
**TAC** - Tactical Training Area  
**TAMIS-R** - Training Ammunition Management Information System-Redesigned  
**TEC** - Training Event Code  
**TBSA** - Training Billeting Services Activity  
**TISA** - Troop Issue Supply Activity  
**TD** - Training Division  
**TDA** - Tables of Distribution and Allowances  
**TOE** - Table of Organization and Equipment  
**TSC** - Training Support Center  
**UIC** - Unit Identification Code  
**USAR** - United States Army Reserve  
**USARC** - United States Army Reserve Command  
**UXO** - Unexploded Ordnance  
**VOQ** - Visiting Officers Quarters  
**VTC** - Video Teleconferencing

## **Section II**

### **Terms**

**Accident** - An unplanned event that causes injury to a person or damage to equipment or property.

**Aerial Firing Point** - A surveyed location over which an armed helicopter may engage targets with its weapon systems.



**Ammunition** - Any and all ordnance items and components designed to be fired from a weapon system or platform; explosive materials used in demolition operations and all pyrotechnic explosive and burning items issued for training.

**Ammunition Point** - An area used for unpacking and preparing ammunition for firing.

**Ammunition Detail** - Personnel assigned duties of guarding ammunition and preparing the ammunition for issue from the Ammunition Point.

**Ammunition Lot Number** - Code number that identifies ammunition made by a manufacturer.

**Artillery Firing Point** - The area within a 450-meter radius of a surveyed firing point specifically designated for use in artillery operations.

**Assistant Safety Officer** - Individuals assigned the duty of assisting the Range Safety Officer in the execution of his duties; while conducting live fire there is a requirement to assign one (1) Assistant Safety Officer to every four firing points, this ratio should be lowered or adjusted when conditions warrant i.e., darkness and fog.

**Bivouac (BIV)** - Location within a tactical area used for overnight encampment. Limited facilities assigned to bivouac locations used for messing operations.

**Cease Fire** - Command to immediately terminate all firing activities. Weapons will be cleared and made safe. Turret mounted weapon systems must be elevated. A cease fire may be ordered by Range Control Personnel, the OIC/RSO or anyone observing an unsafe act.

**Cease Fire Freeze** - Command to immediately terminate all firing activities. Weapons/weapon system will be cleared and made safe without altering any firing data. Personnel will move to the rear of the weapon system and guards will be posted to prevent tampering with the weapon system until Range Control Safety Personnel Arrive. Cease-Fire-Freeze command will normally be given when a round fires out of approved Surface Danger Zone.

**Clear** - Free a weapon of stoppg.; operate a weapon by unloading it and making certain no ammunition remains in it.

**Combat Park** - To park vehicles in such a manner that when departing they will not move in reverse but will drive forward. Tactical vehicles will utilize chock blocks and drip pans when parked.

**Control Tower Operators** - Responsible for the safety of personnel on the range, raising and lowering targets, timing exposures and giving firing commands.

**Cook Off** - Functioning (firing) of a chambered round of ammunition initiated by the heat of the weapon.

**Firer** - Personnel at a firing position on a firing line

**Firing Line** - A line of positions from which weapons are fired. No one is permitted forward of the firing line during weapon firing, except as specifically indicated in this pamphlet (i.e., KD Range Target Detail).

**Firing Point** -

- a. The numbered position to which a firer is assigned during a firing exercise.
- b. Surveyed Point for Indirect Fire Units.
- c. The area within 450 meters of a surveyed firing point.

**Firing Position** -

- a. The point of location where a weapon (other than demolitions) is placed for firing.

b. In the case of demolitions, the firing position is that point or location where the firing crew will be located during demolition detonations.

**Hang Fire** - A temporary failure or delay in the action of a primer, igniter or propelling charge. A hang fire cannot be distinguished from complete failure or misfire for several seconds; ensure the weapon remains pointed down range.

**Incident** - An occasion of noteworthy interest that may or may not result in injury to personnel or damage to property. It may indicate factors that may result in injury or damage to property if the unit Chain of Command does not prevent it from occurring again.

**Impact Area** - The primary danger area having designated boundary within the limits of which all ordnance will make contact with the earth surface.

**Malfunction** - An unplanned cessation of fire due to a stoppg. by mechanical failure of the weapon or ammunition.

**Misfire** - Failure of the propellant charge to ignite wholly or in part.

**Mortar Firing Point (MFP)** - The area within a 450-meter radius of a surveyed firing point specifically designated for use in mortar operations.

**Officer In Charge (OIC)** - The Commissioned or Non-Commissioned Officer in charge of training operations; individual with direct control of all personnel and operations on ranges and within training areas.

**Operational Control** - Authority granted to the OIC to give orders, assign missions or tasks to all personnel on the range.

**Positive Safety Check** - The act of ensuring a weapon is clear by:

a. inserting a rod in the barrel, pushed through the bore until it can be seen in the receiver.

b. by visual inspection through the bore of a muzzle or launcher and the breach.

**Range** - An area which has been approved for the firing of weapons or demolitions and is marked with safety boundary identifiers and has an approved Surface Danger Zone.

**Range Facility Management Support System (RFMSS)** - An automated scheduling documentation system for ranges/facilities that allows installations and range personnel to track activities on ranges and facilities.

**Range Control Officer** - Designated on written orders by the ASA Fort Dix Commander, he **is** responsible for the safe operations, maintenance, coordination, scheduling and development of ranges at USASAFD. He is the authority in all matters pertaining to range use and operations.

**Range Safety Officer** - An Officer or NCO (depending on the type of weapon and firing being conducted) designated to ensure the safe execution of firing or training being conducted; subject matter expert on any weapon system utilized during firing exercise capable of correcting inappropriate or unsafe acts on the Range.

**Range Personnel** - Personnel assigned the duties of assisting the Range Officer in the execution of range operations.

**Ready Line** - A line to the rear of the firing line where personnel are organized and prepared to move onto the firing line to conduct firing.

**Remote Electronic Target System (RETS)** - Automated ranges employing remotely operated targets.

**Rodding** - The act of inserting a metal rod through the muzzle end of the barrel and pushing it through the bore until it can be seen in the receiver thereby guaranteeing no ammunition is present.

**Round of Ammunition** - A round of ammunition comprises all the components necessary to fire the weapon once. In general a round of ammunition consists of a primer, propellant, fuse and booster if necessary.

**Safe** - The condition of a weapon or round when it is unable to fire due to use of a safety feature.

**Safety** - A locking or cutoff device that prevents a weapon or missile from being fired when placed in the ON position.

**Safety Paddle** - A device used by the Assistant Range Safeties to signal the Tower Operator whether or not the firing line is clear.

**Set Down Area** - Designated area on each aerial firing range where aircraft that are experiencing a malfunctioning weapon system will be able to land while keeping the malfunctioning weapon pointed down range and where system repairs may be made after the weapon system is rendered safe.

**Switches Cold** - Aircraft armament sub-systems are considered cold when the master arm switch is on safe or off position and circuit breakers are off.

**Switches Hot** - Aircraft armament sub-systems are considered hot with switches on and circuit breakers in.

**Tactical Area (TAC)** - An area intended for training in tactics (ambushes, patrolling and individual common tasks).

**Target Area** - The location which weapon firing is directed and for demolitions the point where the demolitions charge is placed and detonated.

**Team Control Officer** - Works for the Aerial Range OIC and supervises individual fire team operations within the range.

**Training Facilities** - Term used for the following facilities within USASAFD:

a. Bivouac (BIV) - location within a tactical area used for overnight encampment. Limited facilities assigned to bivouac locations used for messing operations.

b. Firing Points (FP) (Mortar and Artillery) - The area within a 450-meter radius of a surveyed firing point specifically designated for use in mortar and artillery operations.

c. Miscellaneous Training Facility (MTF) - training or testing facility that is designed for a specific event. MTFs are assigned to Range Control, staff agencies or other activities that either schedule or maintain the facilities.

d. Range - an area which has been approved for the firing of weapons or demolitions and is marked with safety boundary identifiers and has an approved Surface Danger Zone.

e. Tactical Area (TAC) - an area intended for training in tactics (ambushes, patrolling and individual common tasks).

**Unit Trainer (UT)** - a qualified pilot placed on military orders for their expertise in weapon systems and aircraft operations and assigned the responsibility for monitoring aircraft and weapon system training and operations.