

# TACTICAL TEAM II

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**1998**

**“NOT  
THE WAY,  
JUST  
A WAY!”**

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# TACTICAL TEAM II COURSE SCHEDULE

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- DAY 1** Administration and Introductions  
Covert Movement Lecture  
Hostage Rescue Lecture  
Lunch  
Planning and Rehearsals (Class-Prac App)  
Active Countermeasures (Blue Bag Drills)
- DAY 2** Live Fire Range Drills  
-Pistol and MP5  
Lunch  
R/R Shooting House Entries  
Dinner  
Dry Clearing Practicals At HKI (N.V.)
- DAY 3** Explosive Entry  
Vehicle Assaults  
Lunch  
Explosive Entry  
Vehicle Assaults  
Assaulter/Sniper Lecture  
Live Fire Night Assaults
- DAY 4** Entire Shooting House Practicals  
Lunch  
Round Robin Entry Practicals W/Mechanical Breaching
- DAY 5** Final Simulation Round Robin Exercises  
- Explosives  
- Simunitions  
- Def-tec  
- Active Countermeasures  
- Vehicle Assaults  
- Breaching

# TRAINING SAFETY RULES

## **A. Rendering the Weapon Safe**

1. Always Point Weapon in a Safe Direction - MUZZLE AWARENESS
2. SAFETY ON (S/white) If Applicable
3. Magazine Removed
4. Bolt, Slide, or Cocking Lever Locked to the Rear
5. Visually and Physically Inspect the Chamber

## **B. FIREARMS SAFETY/MAIN SAFETY RULES**

1. Treat Every Firearm as if it Were Loaded
2. Never Point a Firearm at Anything or Anybody that You Do Not Intend to Shoot, or in a Direction Where an Unintentional Discharge May Do Harm.
3. Never Place Your Finger into the Trigger Guard until Ready to Fire
4. Be Sure of Your Target, Backstop, and Beyond

## **C. GENERAL TRAINING SAFETY RULES**

1. Wrap Around Eye Protection is MANDATORY
2. Ear Protection is MANDATORY
3. Hats (Baseball Style) is MANDATORY
4. Long Sleeve Shirt is Recommended
5. We are Responsible for Each Others Safety - Anyone Seeing a Safety Problem Must Report it Immediately to an Instructor. Additionally, Anyone May Stop an Exercise if They See a Safety Problem
6. Report Any and All Injuries Immediately to an Instructor - Don't Suffer in Silence
7. It is Each Participants Responsibility to Cover All Open Wounds and Cuts Before Class Begins. If this Type of Injury Occurs During the Training Session, the Participant Will Immediately Notify an Instructor, Attend to the Injury; and Cover with First Aid Materials Available which Consists of Band-Aids, Gauze Pads & Tape, Alcohol and/or Disinfectant Wipes. Treat All Blood and Body Fluids with the Utmost Caution. Gloves Will be Used if there is any Possibility of Coming into Contact with Blood or Body Fluids
8. AT NO TIME is any Participant Allowed to Leave the Training Area without the Permission of the Primary Instructor.
9. Remember to Work at Your Own Pace - Don't Over Exert Yourself
10. Realistic Training is Important, However Safety Comes First!
11. Do not Enter Any Unauthorized Areas



#### D. SIMULATIONS/SIMUNITIONS

1. Mouth guards Will be Used, as Needed, for Simulation Training
2. No Live Ammunition Will be Loaded or Carried During Simulation Training Exercises (Double Checked by Participants & Instructors)
3. When Using Blank or Marking Cartridges, or Distraction Devices, You may Only Use Those that are Issued and You Must Double Check Them to Insure they are Intact.
4. Issued Protective Gear e.g. Face shields, Padding, etc. Must be worn properly and at all times during Simulation/Simuniton training until directed otherwise by the Instructor.
5. When using Simuniton rounds, **No Intentional** Groin or head shots will be allowed and shots within two feet of a role player are not allowed.
6. Students will **immediately** cease activities when a sharp sustained blast of a whistle, and/or an instructor yelling stop is announced.
7. Students will immediately cease actions upon a role player announcing "Stop" "Out of Role"!

#### E. SHOOTING HOUSE SAFETY RULES

1. Authorized Firearms Instructors Must be Present During Use
2. **BODY ARMOR** Must be Worn by Everyone who Enters the House
3. Prior to Live Fire Exercises, **Rooms Will be Checked** to Insure that No Personnel are Present
4. Firearms Instructors Will Insure Targets are Placed so that when Engaged, Rounds will Not Exit the House
5. Pistol Caliber Ammunition Shall Only be Used (Approved List)
6. No Steel Targets Allowed
7. Instructors Must Review All Targets and Angles of Deflection Before Beginning Live Fire
8. All Damage Must be Repaired, Replaced and Reported
9. During Multiple Use, Doors Must be Double Locked
10. Rotating Light Must be On During Use
11. Fire Extinguishers Must be Present During Use
12. Building Must be Checked for Damage and Fires, then Secured  
After Use

#### F. FIREARMS SHALL NOT BE HANDLED BY PERSONS WITH A BLOOD ALCOHOL CONTENT IN EXCESS OF .00% BY WEIGHT OR UNDER THE INFLUENCE OF DRUGS OR MEDICATION THAT WOULD IMPAIR THEIR MOTOR SKILLS, JUDGEMENT OR BALANCE.



# COVERT MOVEMENT

The art of stealth, combined with slow, coordinated and quiet team movement utilized in searching for and/or neutralizing a suspect safely.

## **A. When is it used?**

1.

2.

3.

## **B. The technique is still *basically* a search.**

## **C. Requires the utmost in teamwork**



## **D. Safeguards**

## **E. Angle Provides Depth**

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# HOSTAGE RESCUE

## A. Definition of a Hostage

## B. Historical Background

## C. Hostage Rescue vs Warrants & Barricades (Not a static operation)

# PHASES OF A HOSTAGE RESCUE

**1. PLANNING**

**2. REHEARSAL**

**3. MOVEMENT**

**4. ASSAULT**

**5. EVACUATION**

# **OBJECTIVES OF A HOSTAGE RESCUE**

- 1. SAFEGUARDING OF HOSTAGES**
  
- 2. CONTROL & DOMINATE**
  
- 3. PRECISE “*SURGICAL*” SHOOTING**
  
- 4. KNOWING THE EFFECTS OF YOUR FIRE**
  
- 5. COMPLETE YOUR ASSIGNMENT WITHOUT HINDERING OTHER TEAM MEMBERS**

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# **EXECUTION OF HOSTAGE RESCUE**

## **A. ENTRY TEAM STAGED**

## **B. DIVERSION PRECEEDS ACTUAL ENTRY (SOMETIMES)**

## **C. CLEARANCE TECHNIQUES**

- 1. Immediate Threat Concept**
- 2. Running Walls**
- 3. Flooding**

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# OPERATIONAL PLANNING

Planning the operation, and good solid written plans (IF the situation allows) that take all possibilities and eventualities into consideration is a must. Operational planning entails three segments: **Pre-Assault procedures, The Operations Order, and Post-Assault procedures.** A structure and process for the three segments is important so that all things are considered and all aspects of the operation are known to the officers involved.

## **A. Pre-Assault Procedures**(Upon initial notification of the incident)

The pre-assault procedures include the intelligence required to conduct the operation and the notification/briefing of the individuals/elements involved of their duties and responsibilities for THE PLAN.

### **1. Collect information**

- a. **Elicit information - ASK!**
- b. **Examine documents** - Maps, Photos, sketches
- c. **Observation and surveillance** - Recon may be necessary or it may be a requirement for sniper/observer team.

### **2. Target Considerations**

- a. Geographical Location
- b. Interior and exterior layouts of the target to include landscaping
- c. Approach and egress routes
- d. Fire escapes or stairs
- e. Elevators, laundry chutes, air shafts
- f. Location of all doors, windows, skylights and their construction
- g. Access to and from adjoining buildings through roofs or basements.
- h. Construction and peculiarities of the target location
- i. Can it be penetrated by gunfire?

- j.** Does the target pose a fire hazard?
- k.** Are there underground parking facilities? An attached garage? Is it used?

- l.** Are the windows barred? Doors reinforced? Complicated locking system? Which way do they open?
- m.** Does the target site have an alarm system?
- n.** Guard dog or other animals present?
- o.** Location of all utility shut off points - Water, telephone, electricity, gas.
- p.** Location of internal utilities: Sinks, toilets, drains.
- q.** Lighting locations

### **3. Considerations about the Suspect(s)**

- a.** The number of subjects and persons involved to include physical and clothing description.
- b.** The makeup of persons involved. Are they male or female? Are there children in the targeted site? What are the ages of the occupants? Descriptions?
- c.** Number of subjects at the targeted site at any particular hour?
- d.** The identity and background of the leader among the subjects.
- e.** The capabilities of the subjects, considering the following:  
Magnitude of their violations and the subjects' classifications.
- f.** Their previous police records.
- g.** Likelihood of resistance.
- h.** The physical/mental conditions of the subjects
- i.** Are they professionals, drug users, psychotics?
- j.** Are they militants, trained in martial arts, known to assault police?  
What is their military background?



- k. Weapons backgrounds of the subjects (proficiency). Are they armed?
- l. Do they have access to weapons? If so, what types, how many, how much ammunition?
- m. Are they knowledgeable in the use of explosives?
- n. Access of subjects to modes of transportation.
- o. Obtain all registration numbers and descriptions of autos, planes, boats.
- p. Locate all vehicles for purpose of guard and containment during the operation.
- q. Anticipation of media reaction to arrest or to possible death of the subjects.

#### **4. Considerations about Hostages**

- a. Names
- b. Numbers and Physical Description to include clothing
- c. Length and type of captivity
- d. Medical problems to include pre-existing and those that may have occurred during captivity.
- e. Relationship to suspects and/or other hostages
- f. Occupational background and criminal history
- g. Family history and status including financial

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# SUSPECT INTELLIGENCE

DATE	TIME	LOCATION
OFFENSE		
COMPLAINANT		
OVERVIEW		
SUSPECT #		SUSPECT #
NAME		NAME
DESCRIPTION:		DESCRIPTION:
HT WT AGE		HT WT AGE
RACE HAIR EYES		RACE HAIR EYES
COLOR OF CLOTHES		COLOR OF CLOTHES
SHIRT PANTS		SHIRT PANTS
MEDICAL PROBLEMS		MEDICAL PROBLEMS
RELATIVES OR FRIENDS		RELATIVES OR FRIENDS
VEHICLE#		VEHICLE #
LICENSE #		LICENSE #
OWNER		OWNER
DESCRIPTION		DESCRIPTION

## Intelligence Sources

LOCAL	NAME	#
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STATE	NAME	#
FBI	NAME	#

# HOSTAGE INTELLIGENCE

HOSTAGE #

HOSTAGE #

NAME

NAME

DESCRIPTION:

DESCRIPTION:

HT WT AGE

HT WT AGE

RACE HAIR EYES

RACE HAIR EYES

COLOR OF CLOTHES

COLOR OF CLOTHES

SHIRT PANTS

SHIRT PANTS

MEDICAL PROBLEMS

MEDICAL PROBLEMS

RELATIVES OR FRIENDS

RELATIVES OR FRIENDS

VEHICLE#  
LICENSE #  
OWNER  
DESCRIPTION

VEHICLE #  
LICENSE #  
OWNER  
DESCRIPTION

## Intelligence Sources

LOCAL                      NAME                      #

STATE                      NAME                      #

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FBI

NAME

Heckler & Koch, Inc.  
#

H&K International Training Division

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**5. Pre-Assault briefing (WARNING ORDER)** should be conducted with all element leaders. The commander issues responsibilities for planning activities as well as information gathered to date. Information that **has not** been obtained is also identified. The brief does not have to wait for all information requirements to be obtained. As information comes in it is then plugged into the plan. It is a **Warning Order** of the impending actions. The **pre-assault brief** should include the following points:

**a. Information gathered to date** - Any maps, photos, sketches, mock-ups, informer/witness reports, videos should be used during the brief. Include the location and to-date description of the target location and subjects involved.

**b. Time schedule** - Should be given in a backwards sequence from operation execution time and date.

**Include :**

- Sniper/observer/**recon out and in**
- Detailed Planning
- Detailed final briefing time and location
- Equipment
- Inspections
- Rehearsals
- Arrival at and departing final staging area
- Entry
- End of mission

**c. Assignments and Responsibilities** - The commander assigns duties and responsibilities to individuals and elements and may include planning and operational requirements.

**Include:**

- Rehearsal site
- Movement and transportation
- Breaching and entry tactics to include Emergency Action Plans
- Logistics - Who will bring what
- Post-entry assignments such as; Custody and handling of subjects and hostages, wounded, etc.

**d. Communications** - Frequencies to be used, alternates, brevities, include the times and methods for radio checks. Ensure everyone has an operational radio.

- e. Uniforms and Equipment**
- f. Weapons, special equipment, ammo**
- g. Chain of command**

**6. FORMULATE PLANS** From the pre-assault brief the commander and the element leaders should collectively plan the operation. They may initially plan their specific portion, however, they should come together to cement the entire plan. Keep in mind that the commander should have overall authority for the conduct of the operation. As the plan is brought together it should be written.

- A. Sop's** - Used in the formulation of plans and the execution thereof
- B. Emergency plan** - must be the first plan established usually with a smaller assault force that is immediately prepared to conduct a rescue.
- C. Deliberate plan** - This is the total plan. How **we** want to conduct the assault, taking into consideration every detail.
- D. Contingency plans** - These are those “**what if's**” and they must be planned for.



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# The OPERATIONS ORDER (OPORDER)

The following is a format for the written plan. It should also be a guide and possibly help in considering information requirements. **It is not a fill in the blank document. It is a format to follow. Information inserted into the format should address specifically “HOW IT WILL EFFECT THE OPERATION”.**

## 1. Situation:

### A. Suspects

1. Numbers, personalities, description, clothing
2. Activity and location
3. Firearms, explosives, equipment
4. Habits and noticeable patterns
5. Rap sheets and background

### B. Law enforcement elements (who)

1. Entry Team(s)
2. Arrest Team(s)
3. Containment Team(s)
4. Support elements
5. Other agencies
6. Attachments/assets

### C. Location(s)

1. Geographical Location
2. Surrounding area
3. Drawings, maps, sketches, reports, photos, videos, etc.
4. Entrances
5. Alarms/early warning
6. Construction
7. Utilities
8. Vehicles

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## 2. **Mission** Who, What, Where, Why, and How

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### 3. Execution:

**A. Concept of the operation** A statement setting forth the **general** plan to be used in accomplishing the mission. Indicate the principal responsibilities of each element. Plan for deliberate execution, emergency actions, and contingencies. Consider the following: *Final staging areas, LCC's, routes, movement, breaching, clearing, and handling of subjects and hostages.*

**B. Sub-element actions** This is the **specific - in detail - actions** of each element

1. **Surveillance**
2. **Entry Team(s)**
3. **Arrest Team(s)**
4. **Perimeter Team(s)**
5. **Support elements**
6. **Other Agencies**

**C. Emergency Actions** - Emergency situations must be considered as possible situations and specific courses of actions (plans) must be instituted to deal with them.

1. **Compromised or fired upon at the LCC**
2. **Compromised or fired upon at entry point**
3. **Compromised or fired upon from adjacent or nearby buildings**
4. **Fire**
5. **I.E.D's**
6. **Downed Officer**
7. **Wounded subjects and/or hostages**

**D. Contingency Plans** Contingency plans must also be planned for and rehearsed to prepare the teams to react to other situations.

1. **Activities in another building**
2. **Subjects go mobile**
3. **Negotiated actions**

**4. Murphy's**

**E. Coordinating instructions** This is information that pertains to the coordination and control of two or more elements, such as inspections, rehearsals, post-assault procedures, and debriefings.

## **4. Service and support**

- A. General** - Units and departments in support e.g. fire, eod etc.
- B. Material** - weapons, ammo, uniforms, breaks, chow
- C. Medical evacuation**
- D. Crime scene preservation**
- E. Transportation**

## **5. Communications**

- A. Signal**
  - 1. Commo procedures**
  - 2. Frequencies**
  - 3. Call signs**
  - 4. Alternate signals**
  - 5. Additional coordination's** (contact points, phase lines)
  - 6. Telephones**

### **B. Location of leaders**

- 1. CP Location**
- 2. Alternate Location**
- 3. Perimeters**
- 4. Sub and support unit Locations**

### **C. Control**

- 1. Personnel should be readily identifiable as law enforcement**
- 2. Fields of fire**

- 3. Sectors of fire**
- 4. Compromise Authority**

## KEYS TO SUCCESSFUL ASSAULT PLANNING

Plan completely and in sufficient detail but don't over complicate it. **WRITE IT DOWN!** Brief the plan to everyone. Everyone should have a job.

Remember, floor plans are skeletal information; combine it with other information. Obtain photos of the assault objective

All equipment requirements should be identified and assigned to an individual

Formulate sound and comprehensive contingency and emergency plans. And conduct rehearsals.

Use a final coordination point. This could be very important when more than one entry element is used.

Use proper entry/breaching methods and tools. Breaching should afford **positive and rapid entry.**

Arrest and custody team should be staffed with the needed numbers. Make sure there are enough officers on the teams. Consider the occupants and the size of the structure. Cuff and restrain all suspects **prior to search.**

One agency should have primary responsibility for the assault and should have **One Commander.** This agency should then be fully supported by all other agencies involved.

Keep the edge in total manpower, but do not use too many. Keep extra personnel in a ready reserve and use team capabilities to the best advantage.

# **REHEARSALS**

- A. ALL ASPECTS OF OPERATION (If possible)**
  
- B. DUPLICATE CRISIS POINT**
  
- C. REHEARSE WITH ALL EQUIPMENT**
  
- D. ROUTES TO LCC, ENTRY POINT**
  
- E. REHEARSE COMMUNICATIONS**
  
- F. EVACUATION**
  
- G. ALL CONTINGENCIES**



## **E. Post Assault Procedures**

### **1. Crisis point is not secured until the threat is eliminated**

### **2. Maintain security and conduct an accountability of:**

- a. officers (good guys)
- b. hostages (they should be secured, ID'ed and searched)
- c. adversaries (suspects)
- d. injured (they should receive treatment as soon as possible)
- e. unknowns

**Along with accountability, give status and requests for support with a location and specific instructions.**

### **3. Hostage handling** The handling of people who have been held captive.

- a. It begins as soon as the crisis point is entered and continues throughout the assault.
- b. It includes gaining rapid and firm control of the hostages, conducting a search, medical treatment as necessary, evacuation to a secured area.

### **4. Command and control element:**

- a. Duties of the C&C include but are not limited to :
  1. dispatch of E.O.D., medical and other support personnel to needed areas in response to requests from assault teams.
  2. dispatch of back-up assault teams
  3. pass on reports to higher
  4. ensure only authorized personnel enter crisis area
  5. give orders to assault team leaders to begin evacuation
  6. reassemble the force
  7. account for personnel and equipment
  8. preserve the crime scene
  9. maintain security
  10. debrief; get facts straight and lessons learned



## **5. Evacuation**

**A. Deliberate evacuation** The orderly evacuation of hostages from the crisis point which would start on command from the Command element

- 1. This evacuation would be carefully planned and rehearsed and provides the assault element the advantage of maintaining total control over hostage movements and actions.**
- 2. Time would not necessarily be a factor**

**B. Emergency evacuation** - An evacuation which is made in the fastest method possible in the case of unexpected turn of events.

- 1. The emergency evacuation must be well planned and rehearsed to ensure everyone knows what must be done.**
- 2. However, the assault element must be able to modify plans as necessary due to situations within the crisis point, e.g. Hasty or partial evacuation.**

## **TACTICAL TEAM DEBRIEF**

- 1. ALL PERSONNEL ACCOUNTED FOR**
- 2. ALL WEAPONS ACCOUNTED FOR**
- 3. ALL EQUIPMENT ACCOUNTED FOR**
- 4. ANY INJURIES**
- 5. ANY SHOTS FIRED**
- 6. ALL AMMO ACCOUNTED FOR**
- 7. OTHER USES OF FORCE**
- 8. WHAT HAPPENED**

**9. TIME MISSION COMPLETE**

**10. PROBLEMS**

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# LINE DRILLS

## DOUBLE TAPS

**DT at 3,5,7,10,15,25m**

**Stress counting rounds**

**A. Hammer**

**B. Controlled Pairs**

**C. Presenting the Firearm**

1. Mounting
2. Sighting

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# RELOAD DRILLS

- A. Cock back down on one knee, magazine off, fresh magazine on, bolt forward**
  
- B. 2 rds, reload, and fire 2rds**
  
- C. Stress counting rounds**
  
- D. Keep firearm in the shoulder**
  
- E. 2 - 30 rd magazines**
  
- F. Verbalization**
  - 1. Cover
  - 2. Clear

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### 3. Ready

# STOPPAGE DRILLS

## TRANSITION TO THE BACK UP FIREARM

1. Once a stoppage occurs, **PRESS TRIGGER a second time** to confirm the stoppage.
2. Once stoppage is confirmed, the shooter then **TRANSITIONS** to his back up firearm by; **MAINTAINING GRIP OF THE SUBGUN WITH THE SUPPORT HAND, THEN LOWERING THE BACK OF THE SUPPORT HAND** (While holding MP5) **UNTIL IT COMES INTO CONTACT WITH THE SHOOTERS SUPPORT SIDE THIGH** thus maintaining the muzzle down and away.
3. As the support hand lowers to the thigh the **FIRING HAND RELEASES PISTOL GRIP OF THE SUBGUN AT THE SAME TIME.**
4. **THE FIRING HAND THEN GRIPS THE PISTOL AND IT IS DRAWN FROM HOLSTER** and the shooter either fires one-handed while holding MP5 down and away, or once the pistol is drawn the shooter can release the subgun with the support hand and then obtain a two hand grip on the pistol to engage a threat. **\*Remember with either option the shooter must always maintain muzzle awareness with the MP5.**
5. Then, **given the TACTICAL SITUATION**, it is the **shooter's discretion** to either continue the operation with the pistol or clear the MP5 by;
  - A. **Go down on one knee and/or announce "Cover"** (Visual and verbal signal to teammates).
  - B. **Once teammate gives verbal "Clear" and visual (tap) signal** that he is covering you and your threat area, **decock and or place on safe and secure the pistol** back in the holster and activate the security device. **Then;**



- C. **CLEAR MP5**, Lock Back, Mag off, Shake from 4-8 o'clock. Rack Bolt Back and Forth and Lock Back again, Fresh Mag on, Give Tug, Bolt Forward. (Do not point firearm up or down).
  
- D. Announce” **READY**”, **pause**, (to allow the cover officer to resume his duties then shooter can return to his feet and continue

# **FIRING ON THE MOVE - Shoulder**

## **FORWARD:**

- A. Firearm pulled tight into shoulder**
- B. Legs become shock absorbers**
- C. Roll your feet**
- D. Walking**
- E. Not Groucho**
- F. Speeds**
  - 1. Covert
  - 2. Warrant
  - 3. Rescue
- G. Commands**
  - 1. Move
  - 2. Threat
  - 3. Up

# BREACHING

Four things that are a must for a successful breach.

1. Good intelligence on the structure and operation of the breach point.
2. Always plan for an alternate breach point as well as possible requirements for interior breaching.
3. Have the necessary tools required to effect the breach; initial, alternate, and interior.
4. Rehearse all aspects of the breach to include entry following the breach.

## **A. Mechanical**

## **B. Explosive**

## **C. Shotgun**

## **D. Stealth**

# EXPLOSIVES

## EXPLOSIVE EFFECTS

### Types of Explosives

1. Mechanical
2. Nuclear
3. Chemical

### Rate of Reaction

1. Slow (Ordinary Combustion)
2. Rapid (Explosion/Deflagration)
3. Instantaneous (detonation) occurs at or exceeds the speed of sound

### Effects

1. Shock Front
2. Pressure Waves
  - a. Positive Phase
  - b. Negative Phase

### Secondary Pressure Effects

1. Reflection
2. Focusing
3. Shielding
4. Earth and Water Shock

### Thermal Effects

1. Available Combustibles
2. Structural Fires

### Fragmentation

1. Primary Types
  - a. Anti-personnel effects
    - Grenades - Omni-Directional
    - Claymore - Highly Directional
  - b. Anti-material effects
    - Shaped Charges

- Platter Charge
- Contact Charge

# EXPLOSIVE MATERIALS

## Low Explosives

1. Rate of reaction is less than 3280 ft/sec
2. Requires confinement
3. Flame, Friction, Heat sensitive (flame front)
4. Common Ignition sources of low explosives
  - a. Primer Flash
  - b. Burning Fuse
  - c. Hot Wire
  - d. Hypergolic Reaction
  
5. Types of low explosives
  - a. Black Powder
  - b. Smokeless Powder (single, double, triple base)
  - c. Pyrotechnics (color, noise, smoke, light)
  - d. Delay/Relay Devices
  - e. Improvised mixes

## High Explosives

1. Rate of decomposition greater than 3280 ft/sec.
2. No confinement required to obtain explosive effects
3. Shock sensitive
4. Common initiation sources=Blasting cap/detonator
  
5. Types of High Explosives
  - a. Dynamite
  - b. Slurries/Water gels/Emulsions
  - c. Binaries
  - d. Boosters/Primers
  - e. Blasting Agents – Not cap sensitive
  - f. Detonating Cord
  - g. Shaped Charges
  - h. Blasting Caps
  - i. TNT
  - j. C4
  - k. Flex-X, Data Sheet
  - l. Military Ordnance
    - Placed/thrown: grenades, mines

- Dropped: Bombs
- Projected: Artillery Projectiles

### **Improvised Mixes**

1. Flash powder
2. Incendiary Materials

# DEVICE FUSING CONCEPTS

## DELAY

- A. Time
  - 1. Clockwork delay
  - 2. Chemical Time Pencil
  - 3. Electronic (ecell)
  - 4. Material Fatigue
  
- B. Action
  - 1. Pressure
  - 2. Pressure release
  - 3. Push
  - 4. Pull
  
- C. Command Initiated
  - 1. Hardwire
  - 2. Radio Controlled
  - 3. Standoff
  - 4. Delivered
  - 5. Pager/Phone
  
- D. Magnetic
  - 1. Bi-metallic reed
  
- E. Barometric
  
- F. Physical Principals
  - 1. Mechanical
  - 2. Electrical
  - 3. Chemical
  - 4. Combination of all of the above





# ACTIVE COUNTERMEASURES

## 1. Introduction

- a. History
- b. Intro to Defensive Tactics

## 2. Psycho-Motor Skill Development

- a. Mental Conditioning
- b. Body Mechanics
- c. Power Development
- d. Transfer of Force

## 3. Technique Development

- a. Focused Strikes
  - Forearm
  - Knee
  - Angle Kick

## 4. Simulation Training

- a. Low Level - Training Bag