

# Mine Awareness Training





## Intro

### Remnants of War: (ROW)

Explosive Remnants of war (ERW)

Other

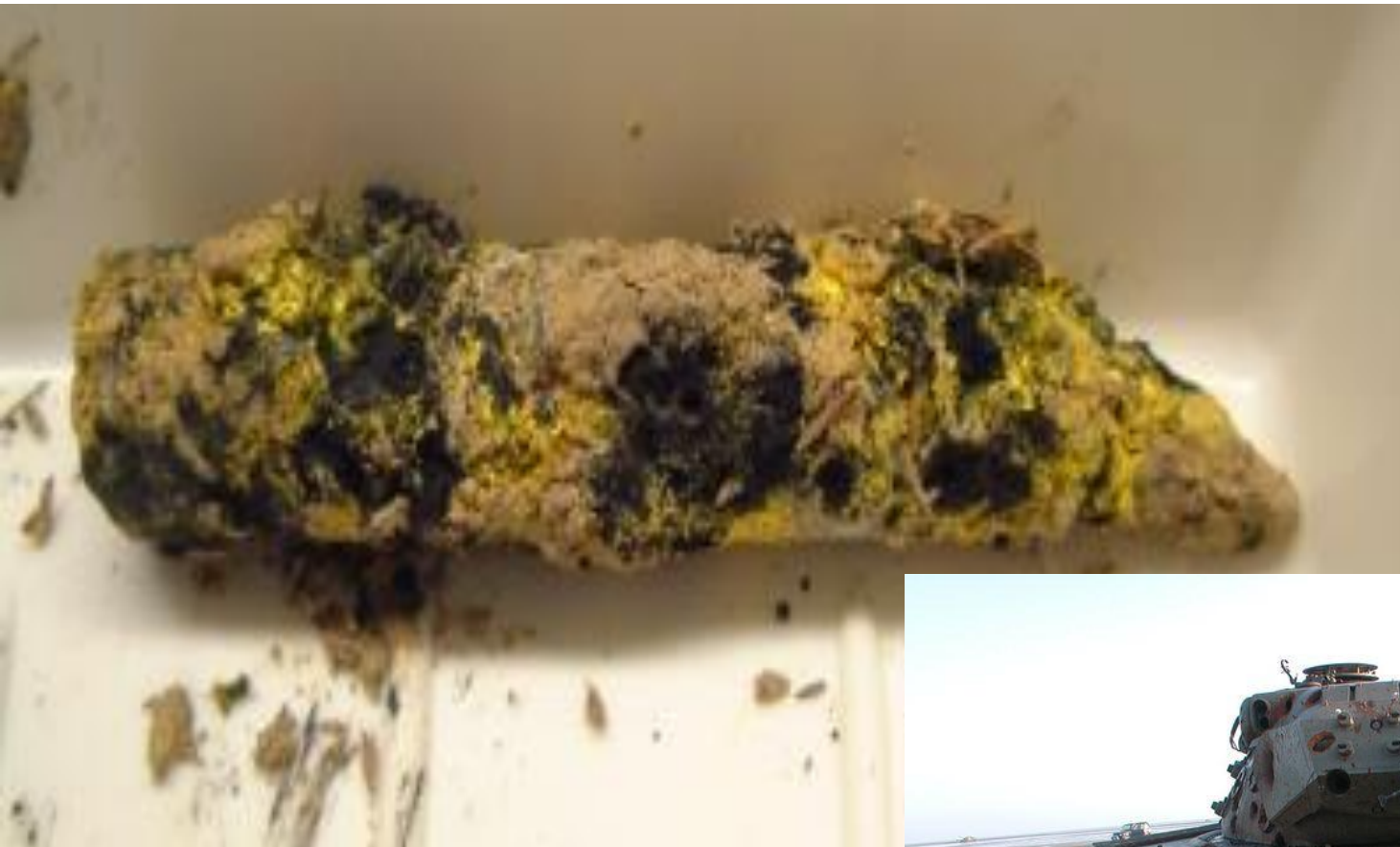
- ERW :
  - unexploded ordnance (UXO)
    - › Abandoned Ordnance
  - Placed ammunitions
    - › Mines
    - › IED
- Other:
  - Infrastructure trenches bunkers etc
  - remnants of ammunitions
  - Other “stuff”

















## Causes of accidents

- **Ignorance**
- **Curiosity**
- **Arrogance**
- **Souvenir Hunting**



## Basic safety rule

# BBB

- Be Prepared
- Be Informed
- Be Aware

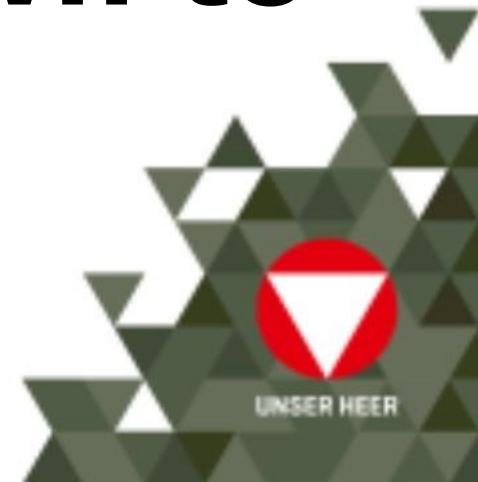




And....

**If you didn't leave it  
Don't touch it!**

**Stay on roads known to  
be safe!**



## Ammunition categories

- **Thrown**
- **Dropped**
- **Projected**
  - **Direct**
  - **Indirect**
- **Placed**
  - **Mines**
  - **IED's**







thrown



dropped



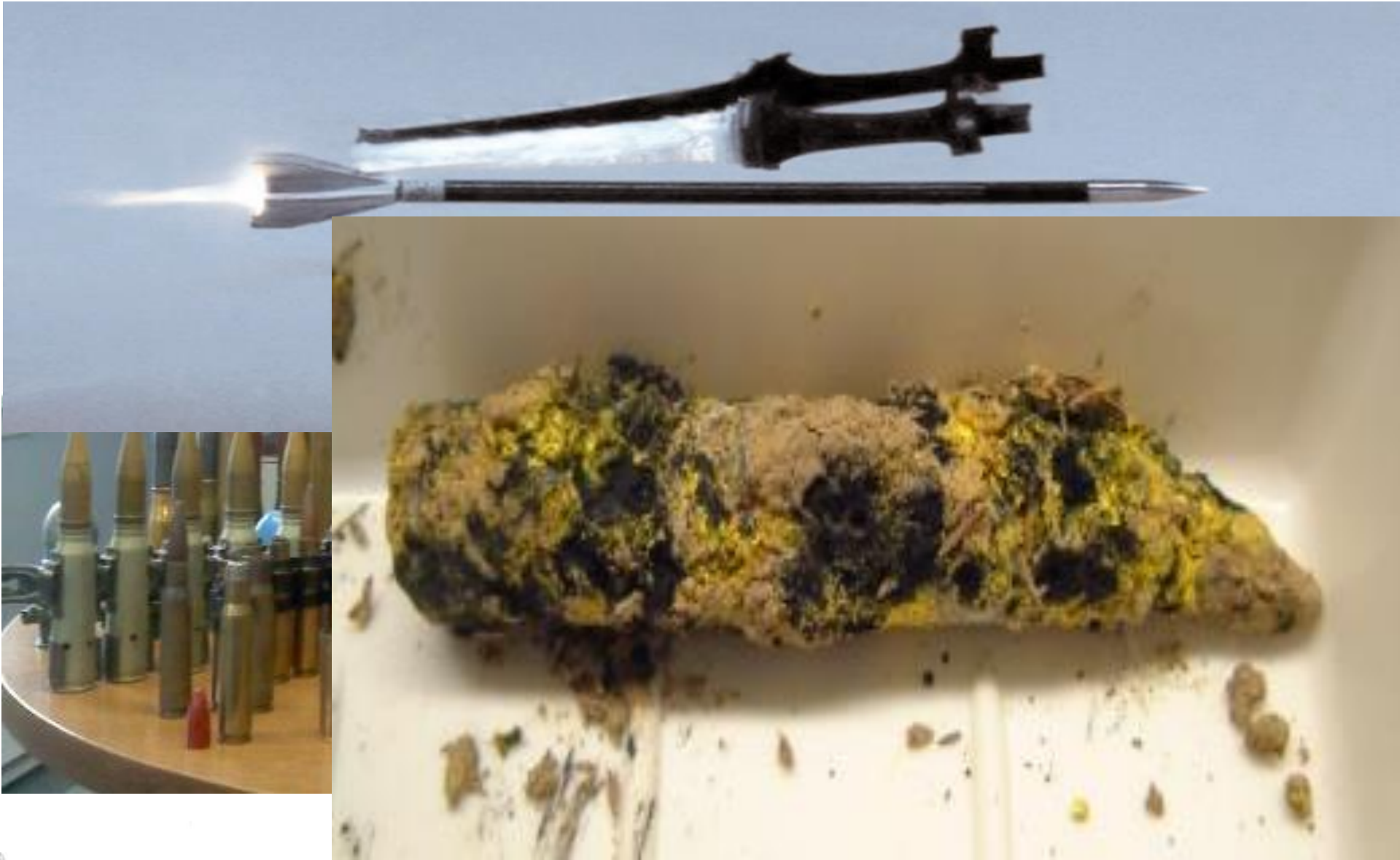




# Dropped cluster ammunition



# Projected Direct







AUSTRIAN ARMED  
FORCES  
AUTINT

projected (rocket/missile)





## Projected indirect



# Projected indirect (remains)





# projected indirect (artillery)



WP



Smoke



Illum



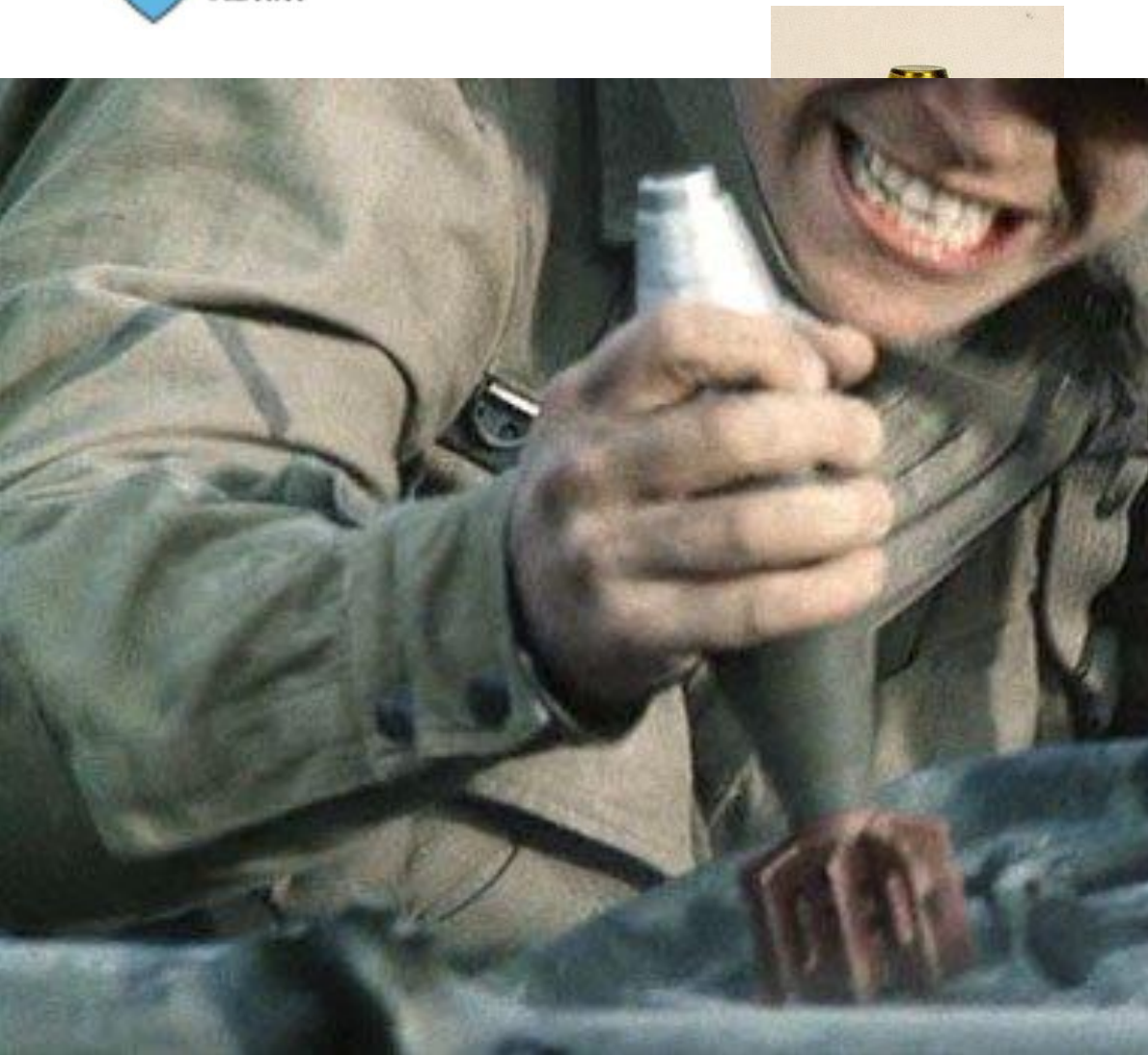
# projected indirect (mortar)



UNSER HEER



# projected indirect (mortar)



# mortar remnants





# Projected indirect (rockets)



HE



HE



WP



WP





# Projected indirect (rocket cluster)



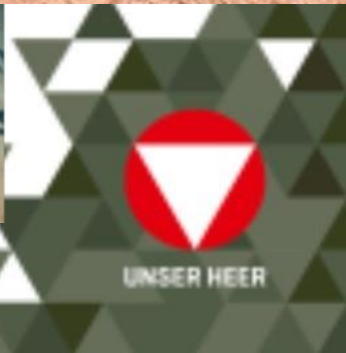


# Projected indirect (cluster mines)



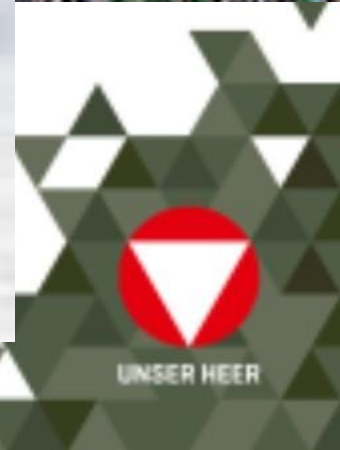


## Placed mines





# Placed mines AP blast





# Placed mines AP fragmentation





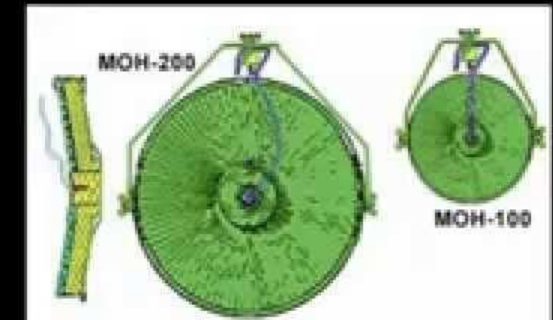
# Placed mines AP directional fragmentation



## MON-50



## MON-90



## MON-100 & MON-200





# Placed mines AP fragmentation bounding



# Placed mines AT track attack





# Placed mines AT Full width attack



Противопехотная мина ПМН-4  
нажимного действия  
(фугасная)



# Mines in their natural habitat



## IED

- IEDs can be disguised as virtually any object,
- Remotely controlled devices allow the bomber the ability to watch and target forces from distance
- Main charges can use any available type of explosives





## Time Delay/ Indirect Vuur

**17 SEP 08**

**2 Rockets detonate IVO PRT Feyzabad**

**3 Rockets were set for initiation**

North  
↓

PRT Feyzabad



**VOIEDs !!!**



# Mines

**And now you found one!**





# Emergency procedures in a minefield

- M** : **M**OVEMENT stops immediately. Stand still and remain calm, or if in a vehicle, stop and do not attempt to reverse or move the steering wheel.
- I** : **I**NFORM those around you of the threat, and your headquarters of your situation and need for specialist assistance over the radio. Use the car horn to attract attention if in a vehicle.
- N** : **N**OTE the area and visually identify any other threats such as tripwires, other mines etc.
- E** : **E**VALUATE the situation and be prepared to take control to avoid additional casualties and ensure those approaching are informed of the threat.
- D** : **D**ONT attempt to move from your position. Wait for qualified help to assist you.

**Who** : Name, organization  
**What** : Group, kind of ammunitions,  
shape, color  
**Where** : Location, coordinate  
**When** : Date and time  
**How** : Approach, marking.

Or format that is prescribed in your area





# Official Markings





# Official Markings





# Official Markings





## Improvised markings





# Improvised markings



## Improvised markings





# Combat indicators

- Markings
- Visible ERW
- wires
- Wrecks
- Cadavers
- Craters
- Waste
- Ground signs
- Special locations
  - Abandoned buildings,
  - destroyed objects
  - battlefield remnants
  - Strategical relevant locations





## Visible ERW



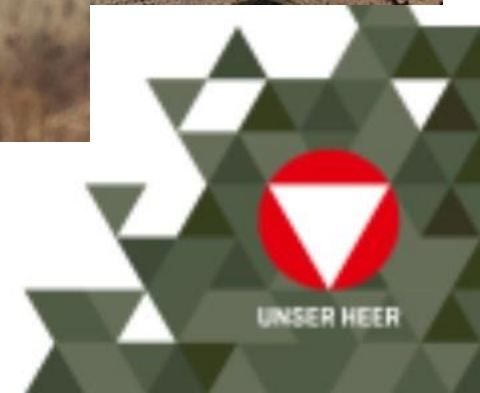


## Visible ERW





# Wreckage





# Cadavers





garbage





# Craters





## Ground signs





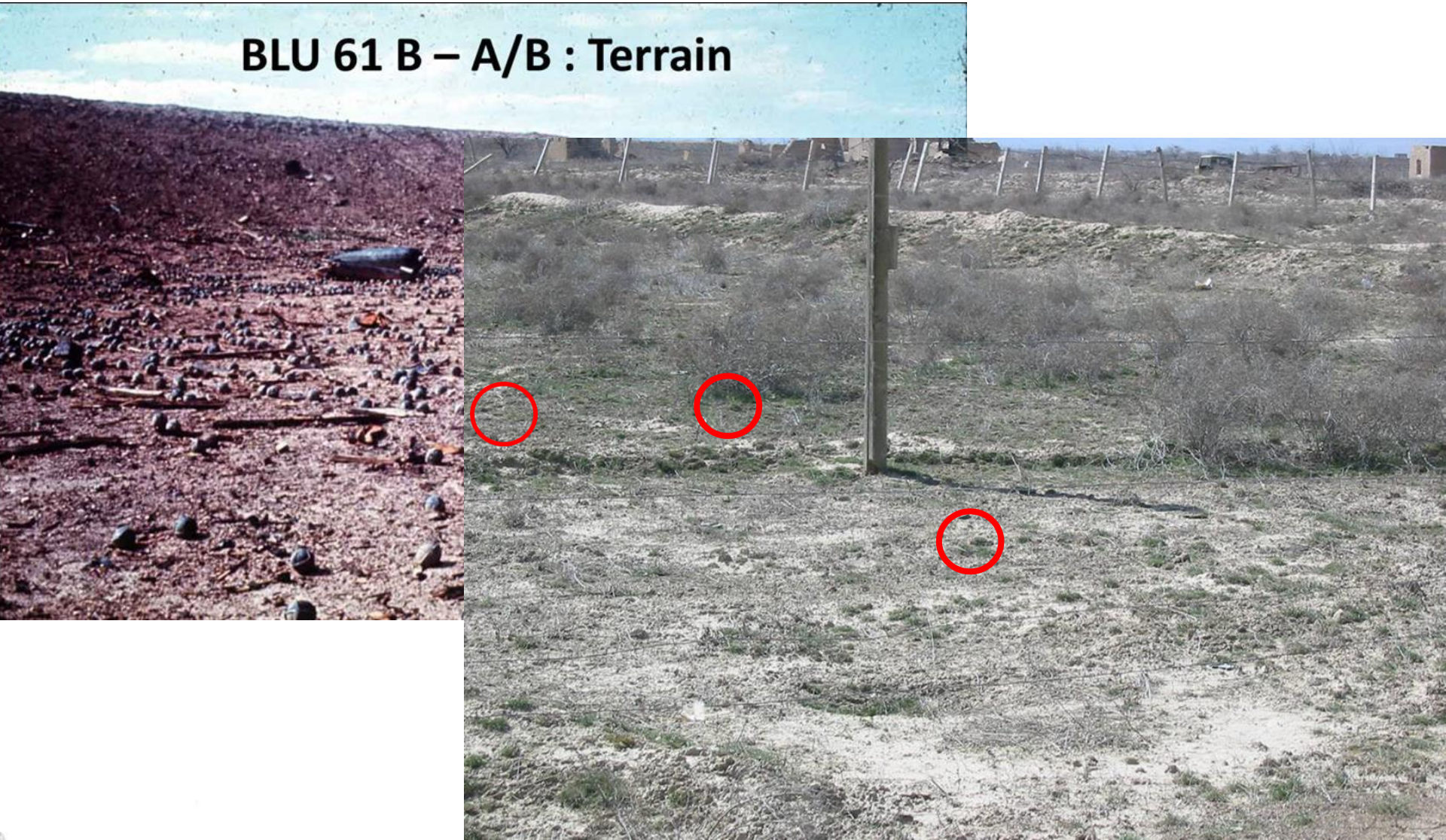
# Abandoned buildings





## Military installation

**BLU 61 B – A/B : Terrain**





# Obstacle



# Questions?

