



Al-Haq

A Guide to Field Investigation

2012

Chris Cobb-Smith



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INDEX

PREFACE	5
1. INTRODUCTION	9
2. AIM & PRINCIPLES	11
3. EQUIPMENT – CHECK LIST	12
4. PERSONAL SAFETY	14
5. PROCEDURES	15
6. MAPS & NAVIGATION	20
7. GPS	23
8. REPORT WRITING	25
9. PHOTOGRAPHY	27
10. WEAPONS & AMMUNITION	29
11. AIRCRAFT, HELICOPTERS & UAVS	34
12. PUBLIC ORDER TATICS & WEAPONS	37
13. CRATER ANALYSIS & ERW	39
14. CASE STUDY 1.	51
15. CASE STUDY 2.	54
16. REFERENCE IMAGES	57

PREFACE

In a visit to the West Bank city of Nablus in 2002 to document Israeli human rights violations committed by Israeli occupying forces I had the chance to meet with Mr. Chris Cobb-Smith, the writer of the present manual. He was there to prepare a report on the types of weapons that the Israeli occupying forces used against Palestinians and their properties in the city and in the Jenin refugee camp during the offensive on the camp in 2002. This was the first time I met him. Seven years later, I learned that he was in Gaza to prepare an expert report for Amnesty International on the damages that Gaza suffered during the Israeli offensive on Gaza which Israel, the occupying power, called “Operation Cast Lead”. That is when I called Chris by telephone and he expressed his willingness to cooperate with us. It is especially in light of the fact that the use of expert reports in different areas are considered important documents for supporting any file related to the criminal prosecution of Israeli war criminals that we began our relationship with Chris.



The idea of the present guide started to materialize when in 2010 Al-Haq invited Mr. Chris to train its filed researchers and the field researchers of other organizations on investigation techniques. In that training workshop Chris presented valuable information on investigation methods and types of weapons used by armies during armed conflicts. Al-Haq saw that Chris' rich experience should be put in the form of a guide that benefits filed researchers who investigate human rights violations committed by Israeli occupying forces in the occupied Palestinian territory.

After the workshop had ended Al-Haq encouraged Chris to visit the village of Al-Nabi Saleh in Ramallah where weekly protests are organized against the Annexation Wall and settlement expansion. The goal behind the visit was to let Chris see directly the situation on the ground and how this situation is different from other conflict contexts. On a Friday morning Chris went to the village before the start of the protests and took a position in a house in the village to monitor the acts of the Israeli occupying forces closely and the weapons they use.

The present guide is the second documentation and investigation guide that Al-Haq has published since its establishment in 1979. The first was published in 2010 and it is a reflection of over thirty years of Al-Haq's experience in the field of human rights. It provides field researchers with the necessary knowledge on methods and mechanisms of human rights violations monitoring and documentation. The present guide has added a more specialized dimension to the first manual. It is intended to equip field researchers and investigators with more specialized knowledge on investigating crimes and human rights violations and the types of weapons used during violations as well. The guide provides detailed explanation of the steps that should be followed before, during and after investigation takes place and the steps that the investigator should take in the event of danger. Additionally, the guide lists the equipments and tools that the investigators should take with him/her to the location where the crime took place.

We believe that any document is not comprehensive enough to answer all the questions with respect to



a given issue. The best way to address this problem is to keep the door open for other people's input and contribution to develop richer other guides and manuals. We further realize that this guide does not apply to all cases of armed conflicts. However, the guide is viewed as a basic reference for the information that every investigator should possess in order for investigation to be in-line with the professional investigation standards and to produce reliable investigation reports that may serve justice in the future.

Shawan Jabarin

General Director

INTRODUCTION

It will not always be possible to deploy a trained and professional investigation team to every incident however important, therefore it may often be the responsibility of the individual who can get to the scene most quickly to examine, collect & record as much information as possible.

This information must describe what happened clearly and in precise detail to provide a definitive & accurate record. This information should be presented in a format that can be used to support a legal case.

The investigator should tell the complete story in a clear written report and if possible be supported by witnesses' statements and copies of any other relevant official documents. Photographs, diagrams and maps as well as any physical evidence should all be used to support the final report.

An investigator that has immediate or early access to the scene of an incident will have a significant



advantage over subsequent investigations. The witnesses' memories will be fresh & clearer and they will be less likely to be confused by rumour and speculation. Physical evidence such as bullet cases, tire marks and blood trails are more likely to be still present.

If the investigation is thorough and presented in a well compiled report supported by accurate maps, diagrams, witness statements and physical evidence there is more chance of it contributing to successful legal proceedings.

NOTE: This is a generic guide. Remember not all of it will apply to your specific country or the particular scenario or case you are working on.

1. AIM

The aim of this basic guide is to assist operators with carrying out practical investigations. This guide will help with the whole process from start to finish: preparation, equipment, navigation, processing the site, photography and writing the report.

2. PRINCIPLES

- A. *Planning & Preparation. However urgent the task, spend time deciding exactly what needs to be done, what resources are required, and consider any safety and security issues. Make a plan.*
- B. *Start the physical investigation as soon as possible – safety permitting.*
- C. *Ensure you make a thorough record of any evidence and take detailed witness statements.*
- D. *The investigator must be impartial, display knowledge, professionalism and be*



methodical in the analysis before reaching any conclusions.

- E. The final report must be comprehensive, balanced and OBJECTIVE to be credible.*
- F. Personal safety – you are there to conduct an investigation, not be the subject of another one!*

3. PERSONAL EQUIPMENT – CHECK LIST

- 1. Notebook & pen / pencil.*
- 2. Still camera – a spare memory card & battery.*
- 3. Video camera.*
- 4. Communications: mobile telephone with a spare battery.*
- 5. Maps: a range of scales, country wide navigation maps small scale map of the specific area, ideally down to 1:50,000.*
- 6. Imagery – aerial photographs if available, print off online Google Earth images.*

7. *GPS – cheap & basic is adequate (many mobile phones now have this technology).*
8. *Binoculars.*
9. *Magnetic compass*
10. *Leatherman / Gerber / Multitool Tool.*
11. *Tape, 30 metres, & 12 inch / 30 cm ruler.*
12. *Torch x 2: head torch & hand torch.*
13. *Gloves – leather for heavy, dirty work & latex for evidence handling to prevent cross contamination.*
14. *Evidence Bags – plastic ‘ziplock’ bags.*
15. *First Aid kit – plasters, bandages, painkillers, scissors, etc.*
16. *Personal administration: water, snacks, emergency / extreme weather clothing.*
17. *Small back-pack – to carry all of the above!.*



4. PERSONAL SAFETY

Not every situation will require such extreme measures but consider taking Personal Protective Equipment (PPE) when you deploy.

- Helmet
- Body Armour
- Eye protection

Note: *Avoid wearing PPE in military colours*

If there is a likelihood of anti-riot measures such as CS gas, consider a gas mask / face mask & goggles

Medical:

Always take a basic First Aid kit – and be sure you know how to use it. Know exactly what is in it and where each item is so you can immediately lay your hands on whatever you need in a hurry.

Communications: ideally have access to at least two methods of communication, for example a mobile phone and an available landline as a backup.

If you are going to a remote area, organise a call in procedure so that someone will be aware if you get into trouble or go missing. For example:

Arrange to make a regular 'check-in' call (every 3 or 6 hours / or as appropriate) to an office colleague or friend. Therefore|:

If your first call is not received: your colleagues will automatically be alerted that something may be wrong.

If your second call is not received: this will confirm that something has probably happened and a procedure should be in place to alert local authorities / police / family / to initiate a search.

5. INVESTIGATION PROCEDURES

a. *Planning. "The 5 Ws" – before starting an investigation, establish:*

- **What:** find out what happened. Was it witnessed? Was it a news report? Or is it a rumour?
- **Where:** get the exact location, work out your route to get there, is there access to site? Find



it on a map, an aerial photograph (Google Earth) or get a diagram.

- **When:** dates, timings
- **Witnesses:** names, locations, contact numbers
- **Who:** is going to be involved? Just yourself? You & a colleague? Do you need a driver? Consider taking an additional expert or guide. Are you working alone or in a team? If a team how, will you organise them? Who is the Point of Contact (POC) at the site?

Also, ensure you consider the following:

- **Research:** do your homework so you are prepared & know the background to the general / historical situation as well as the present political / local circumstances.
- **Liaison with authorities / police / military:** try to make contact with the appropriate authorities in the area where you are to be working. This will ensure your legitimacy and add credibility to your investigation. It could

also ensure your safety & security and might lead to a quicker response should you require assistance.

- **Date/ Timing:** when are you going to do the investigation? Immediately / as soon as possible / when practical / when safe.
- **Transport:** flights, vehicles.
- **Personal Equipment:** see Para. 4.
- **Team/Specialist Equipment:** metal detectors, evidence bags, excavators, generators, lighting.
- **Communications:** mobile/ satellite telephones.

b. Travel to site

- **Time:** work out how long it will take to get there.
- **Navigation:** ensure you have a map, is a guide available?
- **Safety / Threats:** personnel, environment, security force escort.



c. At the Location

Meet witnesses / guides / authorities.

Get a general overview before you get down to details.

Confirm the location on a map and if possible get GPS coordinates.

Imagery: have cameras ready and start filming & taking photos immediately. You will then have some images should you have to leave the area quickly.

Notes: take detailed notes, consider using a voice recorder.

Make a hand drawn sketch of site.

If a detailed processing of site is required: make methodical plan, organise team & assign tasks.

Physical evidence: photograph in place, locate with GPS, add to your sketch. If it is an item that can be taken away (a bullet, a piece of clothing, etc.) place it in a separate bag and label the bag with as much detail as you can.

***Notes on compiling a sketch:** drawing a map of an area & getting everything in proportion is difficult but does get easier with practise. If it is a large area you may find you may have to use several pieces of paper as you run out of room but by always noting where 'north' is and by continually taking measurements it will be simple to put together later.*

d. Take witness statements

It is best to interview witnesses one at a time & alone. If there are others present ensure they do not interrupt.

Ensure each witness reads their statement and signs it with the date to confirm it is correct. In addition to the signature every page should be initialled.

After taking any witnesses statements return to the site and confirm what you have just heard fits in with what you can see on the ground.

6. MAPS & NAVIGATION

Below is a basic guide to maps & navigation which you might find useful. It is important to know exactly where you are at all times and to be able to pass that information on to colleagues.

If possible accurately record all specific locations for the report. If this is not possible use a basic map and mark any relevant locations on it by hand if necessary, but with as much accuracy as you can.

Maps will vary in accuracy and detail. Look in the margins for:

- The scale: for example – 1:50,000 (1 unit on the map = 50,000 units on the ground)
- Symbols that represent woods, roads, rivers, buildings, etc. to confirm locations.
- Remember NORTH will always be at the top of the map.
- The two universally recognised methods of designating locations are:

- a. Grid references**
- b. Geographical coordinates**

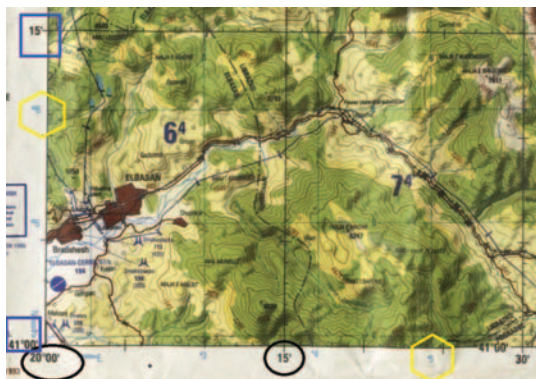
Plotting these coordinates should be left to an expert – but all you have to do is read them off the GPS (see below) and record the figures.

The map below shows where you would find the Grid References and Geographical Coordinates.

Figures in **BLACK** circles: geographical coordinates - Eastings

Figures in **BLUE** squares: geographical coordinates - Northings

Figures in **YELLOW** hexagons: Grid References



Additional options:

Google Earth: online at www.earth.google.com
This is an excellent facility to download a designated area & make annotations to support a report. Geographical coordinates can be easily plotted as they are displayed automatically with the cursor.

Online maps: UNOSAT – free from UN website

7. GLOBAL POSITIONING SYSTEM (GPS)

A GPS will provide an accurate location with a series of numbers that is internationally recognised and can be plotted on any good map.

A GPS is a useful tool for navigation but is essential for determining and recording exact geographical locations with can be done to a high degree of accuracy.

Always maintain a GPS in a fully charged condition and always carry spare batteries.

Operation:

The GPS needs unhindered view of sky; it will not



work in a car or in a building, although remote antennas are available.

Each time it is switched on it will need time to 'acquire' satellites, this may take some minutes.

Once the satellites are 'acquired' the system will give a location. Check for accuracy, this will be given as $\pm$ or $+ / -$ metres, it should go down to at least 20m.

Store significant locations as 'Waypoints' in the GPS memory and give them a name that you will recognise. The GPS will automatically just record the Waypoint with a number. If there are likely to be a large number of Waypoints and no time to rename them, note them in a notebook with a comment.

Always relate important locations to a map for a double check.

Many mobile 'phones also now have a GPS function which will provide Geographical Coordinates.

8. REPORT WRITING

If possible use a recognised, standard format for each report. The headings below are just a few suggestions.

Headings: Title of the Report

Date: the date of the report.

Author: who wrote it, with contact details.

References: any documentation that a reader might find useful or essential to refer to whilst reading the report, i.e. a legal manual, a previous report, etc.

Summary: a synopsis of the entire report for those who do not have time to read it all.

Aim: why the report was produced and what it hopes to achieve.

Introduction/Background: a brief political, historical description of the general situation to set the scene.

Investigative Team: list the makeup of the team by name, their qualifications and roles.

The Investigation: Conditions & factors – light, time, weather, etc.

Findings: The facts as found by the investigator / team

Sequence of Events: Tell the story of what you believe happened to the best of your knowledge & from the facts that you have discovered from your investigation.

Analysis: This can be your opinion drawn from what you have deduced from the relevant facts, the evidence you have seen and the witness statements.

Conclusion: Any final deductions.

Annexes: original supporting material - witness statements, photographs, medical reports, lists, maps, diagrams, etc.

Enclosures: physical evidence (bullet cases, items of clothing, munition fragments, etc.)

NOTE: *Some of the Annexes may be as important as the report itself. Documents such as Witness Statements will lend weight and support the findings of the report as they are the sworn evidence of someone who may have actually seen the incident. Medical reports could also be crucial as they are documents produced by the experts. Remember to annotate each Annex with a letter (Annexes are usually designated A, B etc.), report title & date so it can be readily identified as part of your report.*

9. PHOTOGRAPHY

Use photographs and video as a method of telling the story. Go through the incident methodically, 'walking through' the scene.

Photographs: Get wide shots of the general area from a vantage point to illustrate the environment – a street, a hill or a valley for example. This will help anyone reading the report to visualise the scene.

Take images of areas with the items of interest visible to put them in context – e.g. the destroyed building amongst the others in the road / the burnt out car in the street / the shell crater in the field.

Remember to use a pointer to indicate where 'North' is in these photographs.

Close up, detailed shots – markings, designations, serial numbers, pieces of electronics, etc. Take several photos of each item from different positions – there will be more chance of getting at least one good image.

Remember to use something to show the scale of the item, ideally a ruler or tape measure but even putting a pen next to it will give an idea of

the size of the subject. It is essential that experts tasked with identifying items in photographs have a means of reference. See Para. 16.

When photographing the impact of a direct fire munition (tank, RPG, etc.) photo along the suspected trajectory both towards the target and back towards where you think the weapon system was located.

Log Photos with incident, location with the date and the time. & Back Up all Imagery!

Video: When filming a scene keep the camera steady for 10 seconds.

Pan & zoom if necessary to illustrate the scene, but SLOWLEY & do not Pan and Zoom at the same time!

Film is cheap & plentiful, so film as much as possible.

Give a verbal commentary whilst filming the scene describing exactly what happened and what the camera is looking at.

10. WEAPONS & AMMUNITION

Field workers who are likely to be involved in investigations in combat zones should have some knowledge of weapons systems and munitions, how they are employed and what to look for in the aftermath of an incident. This is a basic guide to weaponry and the terminology with a few examples.

Direct Fire: the weapon can see the target:



Indirect Fire: the weapon cannot see the target. The location of the target may be obtained from an observer (who can see the target) sending a map reference, located by radar or Unmanned Air Vehicle (UAV)



Note: Weapons and munitions are usually designated by their calibre, that is the diameter of the barrel or munition, i.e. a tank might have a 120mm gun, a rifle a 7.62mm bullet or a missile be 70mm in diameter.

TANKS

Types: T72 (Russian), Abrahams (US), Merkava (Israeli)



A direct fire weapon

Main armament: 120mm, 125mm

Effective Range: 1,500 metres

Secondary armament (7.62mm machine gun)
range: 1,500 metres

Munitions: HE (High Explosive) or Solid Shot
Projectiles.



ARTILLERY

Usually an indirect fire weapon system but can be used in the direct fire role



Typical Calibres & Ranges: 105mm up to 17kms,
155mm to 24kms

Ammunition Types: HE (High Explosive), Smoke,
Illuminating, WP (White Phosphorus)



Artillery charge bags & fuses



An unexploded artillery shell

MORTARS:

An indirect fire weapon
No direct fire capability



Typical Calibres: 60mm, 82mm, 120mm

Ammunition Types: HE, Smoke, Illuminating, WP

Typical Ranges & calibres: minimum: 600 metres, maximum: 7.2 kms

Effects: Blast and fragmentation danger area up to about 100 metres from point of impact.

MISSILES:

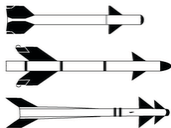
Ground to Ground indirect fire: Cruise Missile, Exocet, Sagger

Ground to Air – Patriot, Stinger, SAM-7 (Grail)

Air to Air – Sidewinder, Sparrow

Air to Ground – Hellfire, 57mm rockets

Ground to Ground direct fire – Milan, Javelin



Guidance: Wire Guided, Optically guided, Fire & Forget (heat seeker), 3rd Party Guided (laser from another source)

Effects: Blast and fragmentation

Rockets: Scuds, Grad BM -21

Typical Calibres: 107mm, 122mm

Ranges: Grads to 40 kms

As a broad definition: missiles tend to be guided, rockets follow a ballistic trajectory.

SMALL ARMS

Rifles: SLR, AK 47, M16 Armalite



Ranges: max 400 metres

Calibres: 5.56, 7.62mm

Machine Guns: RPK, RPD, GPMG



Ranges: max 800 – 1800 metres

Calibres: 5.56, 7.62, 12.7mm (0.5 in)

ERW: Shell cases, bullet heads from which calibres can be determined

Sub-machine Guns: Uzi, Heckler & Koch



Effective Range up to: 100 metres

Typical Calibres: 9mm, 0.45in

Revolvers & Pistols: Browning, Beretta, Sig, Glok



Effective Range: up to 30 metres

Calibres: 9mm, 7.65mm, 0.45 in

11. AIRCRAFT, HELICOPTERS & UAVS

AIRCRAFT: F15, F16, etc.

Weaponry: Bombs, 500lbs,
1000lbs, freefall, laser or
GPS guided



Missiles: See Air to Air / Air to
Ground Missiles (see page 10)

Ranges: up to 70 kms

Rockets: 70mm, 127mm

Ranges: up to 10 kms



ERW: light metal & circuit board pieces,
electrical parts, wires

Cannon: 20mm or 25mm

Ranges: 1000 m +

ERW: occasional complete cannon shell and / or
fragments

HELICOPTERS



Weaponry:

Rockets: 70mm, see Para. 16. Images

Range: 11.5 kms,

ERW: light metal pieces, fins

Missiles: Hellfire

Range: 8000 metres

ERW: light metal pieces, fins, electronics

Canon: 30mm / 20mm

Range: 4.5 kms

ERW: entire or fragments of shells

UAVs (Unmanned Aerial Vehicles):



Weaponry: missiles, i.e. Hellfire

Ranges: varies according to missile (Hellfire – 8kms).

ERW: light metal & circuit board pieces, electrical parts, wires, fins.



12. PUBLIC ORDER TACTICS & WEAPONS

There may be a requirement to investigate an incident that has occurred during a demonstration or a riot. Although fatal weapons may not have been deployed the same procedures apply.

SAFETY TIP: If a situation is ongoing do not ever get in between the demonstrators and the security forces.

If there is a record of use of an incapacitating gas such as CS be prepared and have a mask and some goggles to hand.

Weapons:

Water cannon: can be used with a colouration dye or 'skunk' a vile smelling additive.

Crowd dispersal gas (CS): this can be fired from a conventional rifle, a hand held launcher, a vehicle mounted launcher or deployed by hand thrown grenade, various examples can be seen below.



Rubber bullets (below):

usually fired from a hand held launcher



Rubber coated bullets: metal balls approximately 15mm in diameter coated with rubber and fired from an attachment to a rifle. These can still be lethal.

Stun grenades:

These non lethal explosive munitions are designed to temporarily neutralise an aggressor with a bright flash and a loud bang.



These are usually hand thrown. There are variants that activate with a series of detonations.



13. CRATER ANALYSIS & ERW (EXPLOSIVE REMNANTS OF WAR)

The aim of 'Crater Analysis' is to exploit any location where a munition has activated in order to extract as much information as possible to support an investigation.

By analysing a crater made by a projectile critical information can be obtained. The type of munition can often be determined by the size and shape of the impact mark and therefore the type of weapon and method of delivery can usually be identified. The direction of fire can often be ascertained by the shape of the crater or burst pattern.

By examining any ERW, the type, size & even country of origin may be ascertained by fragments, fuses, fins and other components recovered from the scene.

Aircraft Bombs:

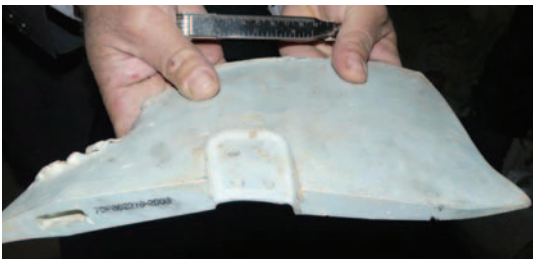
Usually fall in a near vertical trajectory; large impact crater in rural area, catastrophic destruction in urban areas / buildings. Bombs may have a 'delay' fuse, i.e. detonation will be momentarily delayed to occur after the bomb's initial impact.



This can minimise collateral damage in urban areas. Below are images of craters made by air delivered bombs:

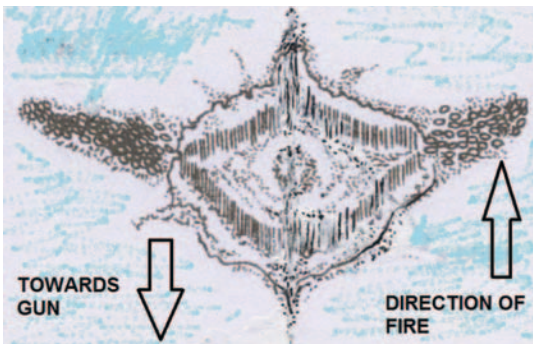


ERW: heavy metal fragments, fins, attachment lugs – see below.



Artillery:

Size of crater depends on calibre of shell and type of ground (soft ground = large crater). It is often possible to identify the direction from which the shell was fired. Remnants of the fuse can often be found in the base of the crater.



ERW: jagged fragments, fuses, pieces of driving band (see arrowed below)



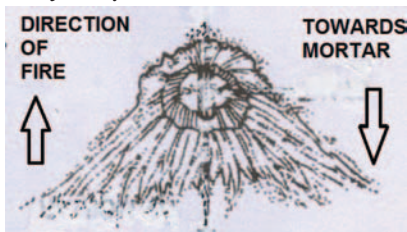
Unexploded artillery shell



Artillery shell fragments

Mortars:

Mortar bombs usually land in a steep, near vertical trajectory.



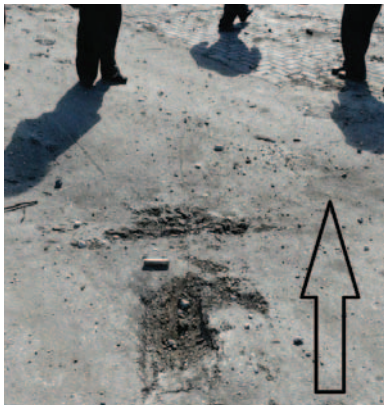
The direction of fire can be seen clearly from the two photos below



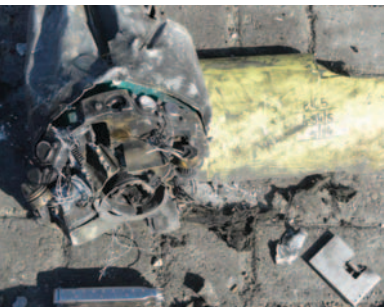
ERW: Small, steel fragments, the fuse can often be excavated from the crater on soft ground; usually the tail fin survives impact and can be recovered – see below.



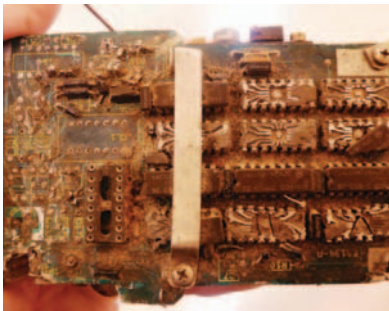
Missiles:



The diagram above right show a missile crater on hard ground with the direction of impact designated.



ERW: above a Hellfire missile motor; light metal fragments & fins, electrical parts, pieces of wire & circuit board pieces (below right) and even designation plates (below left) can be found.



Rockets:

ERW: usually larger & heavier metal casings than found with missiles, but rocket motors, fins, motor/engine pieces can usually be recovered.

Tanks:

When investigating tank fire try to trace the trajectory back to the firing point and the location of the tank. CASE STUDY 2

ERW: An expended shell case, below left, note the information that can be gained from the base; a fragment from an expended tank round, below right.



RPG:

Rocket Propelled Grenade, often results in a distinctive pattern on a wall or building.



ERW: small light fragments and usually the tail fin section can be found nearby after detonation, see below



Hand Grenades:

Usually leaves a small, rounded, evenly shaped crater.

ERW: Occasionally the fuse can be found, but fragments tend to be too small. Look out for the 'ring pull pin' in the area from which the grenade may have been thrown.

Small Arms ammunition / bullet strikes:

remember small arms are direct fire weapons, the firer can see the target. It is often possible to trace back along the trajectory from the 'strike mark' to the firing position and so calculate the range.



ERW:

Shell cases, bullet heads from which types & calibres can be determined.

ACTION for ERW:

Photo the item in place, plot & record location, collect evidence if safe and legitimate (see Note below). Photograph the shot impact ('strike' mark).

***Note:** for all investigations be conscious that any significant incident may be the subject of another investigation; way up the impact of you moving evidence and compromising any further investigation against the risk of it being lost if not secured.*

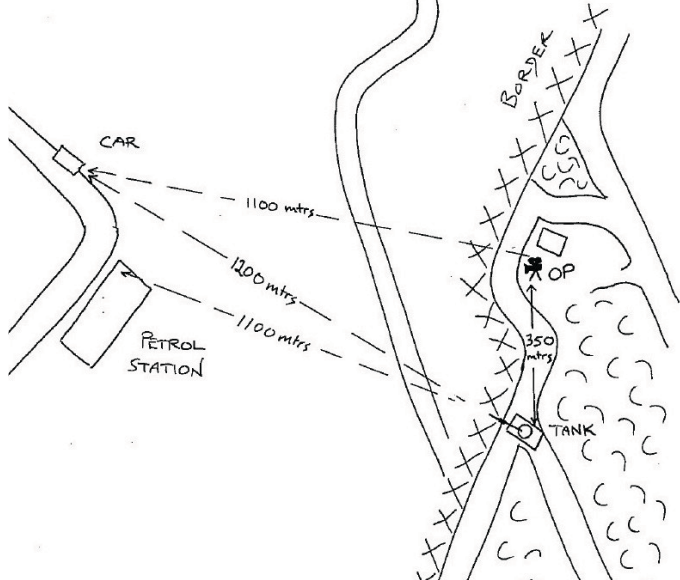
14. CASE STUDY 1

Whilst filming the withdrawal of invading troops across an international border a TV news team's car was fired on by a tank killing the driver. An investigator was contracted to determine exactly what had happened.

It was not possible to travel to the area immediately but first hand reports from witnesses were gathered over telephone. Before travelling to the scene news film footage and photograph of the incident which had already been broadcast were studied. Several media companies had a lot of useful imagery that had not been broadcast that they made available to the investigator.

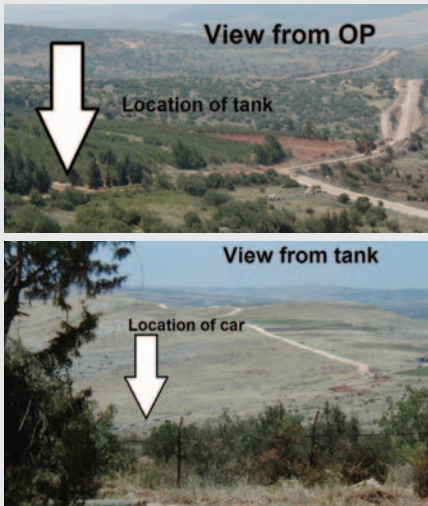
With a reasonable idea of the sequence of events the investigator then visited the area from where the shot was fired, although was not able to cross the border to the location of the car. With a detailed map and by referring to the film footage to the ground a reasonably accurate diagram was constructed.





The key to this investigation were the numerous clips of film taken of the incident by a number of news teams at the Observation Point (OP). The news teams were indentified and copies obtained. By reviewing all the footage taken that day and by constructing a timeline it was possible to determine the exact sequence of events. All professional film will have a time code showing exactly when the images were taken. (However beware it does depend on the camera's clock being set accurately!) The TV crew who had just left the the car had also just started filming so their footage was also available and provided additional invaluable

evidence. By editing critical frames of film from seven different sources it was definitively proved where the shot came from and exactly which tank fired the fatal shot.



In this case no witnesses were available and it was not possible to gather any physical evidence from the scene but the combination of the film, the testimonies from the TV news crew & evidence from the specialist investigator provided a conclusive case. This in turn led to admission of culpability and eventually compensation for the family of the driver.

15. CASE STUDY 2

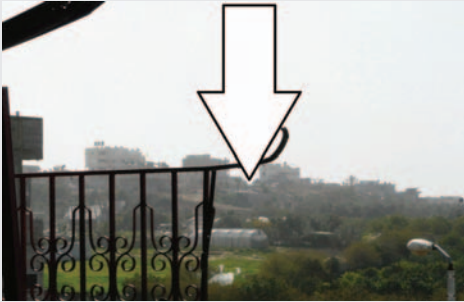
An explosion occurred in a block of flats killing a number of children. The particularly tragic circumstances and high profile case lead to a range of speculation, accusations and apportioned blame in the media.

Arriving at the location the apartment was immediately identifiable from the street by damage to the balcony (see below left).



The apartment was badly damaged but one room in particular was totally destroyed with the balcony and front wall blown in by a blast. The projectile could only have entered horizontally as there was little damage to the floor or ceiling. There appeared to be some damage to a side wall of the room as well so it was reasonable to conclude that the projectile

entered through the balcony and exited through that side wall. This was supported by the shape and impact marks on the wall on the exterior of the building.



By lining up the most likely trajectory that a projectile could have taken in accordance with the damage it was possible to get an approximate idea of the location of the firing point. (see image above right). Approximately level with the apartment, approximately 2 kilometres away was a ridge overlooking that area of town.

The ridge was located on a map and with careful observation from the apartment a number of likely firing point locations were identified: open ground, gaps between buildings, etc.



Fragments from the projectile were collected and these were examined and photographed (see image above left). They were found to be consistent with the type of fragments found at the scene of other impacts from tank rounds.

We then visited to the ridge and drove along the length that was visible from the apartment, stopping at the positions we had identified as the likely firing points. Three of these locations were churned up by tank tracks and littered with spent ammunition and debris from army ration packs. At each location we viewed the apartment through binoculars to see if the impact strike marks were consistent with the trajectory we were looking along.

The balcony and front wall of the flat was visible from most of the locations we visited but only at one was daylight visible from the hole in the side wall of the flat where the round had exited. In addition the impact marks on the external wall were consistent with the angle at which the tank round had penetrated the apartment (see image above right). It was conclusively determined that the damage to the apartment was caused by a tank shell and the specific location of the tank responsible for firing that shell identified.

16. ADDITIONAL REFERENCE IMAGES



Mortar Bombs



Tank Ammunition



Rockets



Anti Tank mine



Artillery shell fragments



Anti Personnel Land Mines



57mm air to ground rocket



Russian hand grenade



Egyptian hand grenade



106 mm recoilless anti tank round shell case & packaging tube



Chinese Type 72 anti tank mine



Spigot anti tank weapons



120mm MAT mortar shell



Milan anti tank tubes

About Al-Haq

Al-Haq is an independent Palestinian non-governmental human rights organisation based in Ramallah, West Bank. Established in 1979 to protect and promote human rights and the rule of law in the Occupied Palestinian Territory (OPT), the organisation has special consultative status with the UN Economic and Social Council.

Al-Haq documents violations of the individual and collective rights of Palestinians in the OPT, regardless of the identity of the perpetrator, and seeks to end such breaches by way of advocacy before national and international mechanisms and by holding the violators accountable. The organisation conducts research; prepares reports, studies and interventions on the breaches of international human rights and humanitarian law in the OPT; and undertakes advocacy before local, regional and international bodies. Al-Haq also cooperates with Palestinian civil society organisations and governmental institutions in order to ensure that international human rights standards are reflected in Palestinian law and policies. The organisation has a specialised international law library for the use of its staff and the local community.

Al-Haq is also committed to facilitating the transfer and exchange of knowledge and experience in IHL and human rights on the local, regional and international levels through its Al-Haq Center for Applied International Law. The Center conducts training courses, workshops, seminars and conferences on international humanitarian law and human rights for students, lawyers, journalists and NGO staff. The Center also hosts regional and international researchers to conduct field research and analysis of aspects of human rights and IHL as they apply in the OPT. The Center focuses on building sustainable, professional relationships with local, regional and international institutions associated with international humanitarian law and human rights law in order to exchange experiences and develop mutual capacity.

Al-Haq is the West Bank affiliate of the International Commission of Jurists - Geneva, and is a member of the Euro-Mediterranean Human Rights Network (EMHRN), the World Organisation Against Torture (OMCT), the International Federation for Human Rights (FIDH), Habitat International Coalition (HIC), and the Palestinian NGO Network (PNGO).