

# OPERATIONAL STUDIES

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## THE LAW ENFORCEMENT SNIPER

### ASSET or LIABILITY

#### Part 1 of 2

By

**Mark V. Lonsdale**

Reducing Liability Exposure through the use of Select Personnel,  
Professional Training and Superior Weapons Systems

Gun magazine articles often cover sniper rifles and related equipment (to keep their advertisers happy) while barely touching on the importance of professional training. Even when equipped with the best sniper weapons systems, to deploy snipers who are unskilled or poorly trained could not only lead to tragedy and expose an agency to litigation, it could well be deemed criminally negligent.

However, in this modern litigious society, even the best training and equipment does not shield an agency or individual sniper from years of litigation. Case in point – the FBI incident at Ruby Ridge in August 1992 when the wife of Randy Weaver was shot by a highly trained HRT sniper. This questionable shooting was the result of *modified rules of engagement* that were issued to the FBI snipers before they deployed into the woods around the Weaver cabin. After being approved and signed off by headquarters the snipers were instructed that, “if any adult in the compound is observed with a weapon after the surrender announcement is made, deadly force can and should be employed to neutralize the individual. If any adult male is observed with a weapon prior to the announcement, deadly force can and should be employed.”

This was tantamount to a shoot-to-kill order as opposed to the standard use of deadly force in “defense of life only” shooting policy used by most agencies including the FBI.

The result was years of investigation, litigation and finger pointing most of which focused on the sniper when it should have been directed at FBI bureaucracy and command personnel.

Military snipers have suffered under a long history of being misused by commanders unfamiliar with their unique abilities, and there are cases where law enforcement snipers have been assigned to traffic duty and outer perimeter by equally ignorant incident commanders. Even though a sniper element can be deployed in a variety of roles on tactical operations – for example, as part of the assault group, perimeter security, or

hostage/prisoner reception – snipers usually have very specific tasks to perform. These are primarily to observe, report and if necessary engage with precision fire.

Whether police or military, the snipers operate under a set of conditions that leave very little room for error. Most mistakes can have tragic results and any deficiencies in equipment or training will prove to be a major liability exposure for the agencies involved.

## **LIABILITY EXPOSURE**

Every aspect of sniper operations, from command, control and communications (C3) to equipment and training, must reflect currently accepted national standards and procedures for the judicious use of deadly force in a long rifle capacity. The days of sending out minimally trained deputies with a deer rifles to serve as SWAT snipers are long gone. Any damage to person or property resulting from those deputies' actions, directly or indirectly, will have the ambulance chasing lawyers licking their greedy lips in anticipation of their day in court.

Before an agency gets into the SWAT, HRT or sniper business, the administration and command staff should be prepared to commit adequate time and funds to professionally training and equipping the team. Black suits and submachine guns do not make a SWAT team – even though a number of smaller agencies deploy with little more than the image of a SWAT team.

Developing a tactical capability requires significant financial commitment on the part of the agency, not just for the initial equipment purchases but more importantly for continued professional training, allocated training time, and considerable amounts of ammunition.

The following list represents just some of the more obvious potential liability exposures for an agency utilizing snipers.

### Potential Exposures:

1. Unqualified or poorly trained long riflemen ("Hughie and his deer rifle")
2. Poor Selection & Qualification Standards, or worse, no written standards at all
3. Sub-standard Initial Basic Training
4. Inferior Weapons Systems more suited to hunting than tactical operations
5. Inferior Ammunition that is not proven "match grade"
6. Poor Inter-team Communications
7. Lack of Training Time (One morning per month is not enough)
8. Lack of frequent Documented Training
9. Lack of Written Policy, Procedures (SOPs) and Rules of Engagement (ROE)
10. Undocumented Individual Qualification Shoots
11. Unrealistic Training usually under ideal conditions on a 100-yard target range
12. Unrealistic Targets (Bulls-eye or benchrest targets at 100 yards)

13. Lack of training on Through Medium Shooting (Windows / Glass doors)
14. Lack of Training on Moving Targets
15. Unscientific Approach to Equipment and Ammunition Testing
16. Lack of Critical Decision making Shoot / No-Shoot Drills & Scenario-based Training

Over the past years we have had assigned snipers turn-up at STTU sniper matches with the cheapest ammo available, no log books and virtually no basic marksmanship skills. They had received no formal training before being assigned the sniper's slot on the SWAT team, and the only practice they had had consisted of 20 rounds per month, at 100 yards, from a bench-rest or prone position with a bipod. They seldom if ever trained in low light conditions or at night; never under less than ideal conditions like wind or rain; seldom at close-proximity hostage-taker targets; and never through a glass window into a realistic structure.

The concept that training must replicate reality, within the bounds of safety and reason, is not new in either law enforcement or military. Further more, in wrongful-death litigations, failure to document satisfactory levels of performance under a variety of realistic training conditions, can only serve to damage the reputation of the sniper team, and the agency, city or county that employs them.

### **TACTICAL ADVANTAGES OF THE SNIPER**

A well-trained, competent sniper team can be a significant asset on most tactical operations. Two advantages of deploying snipers are that they should be able utilize their concealment and stalking skills to move undetected in a scouting mode, or neutralize a treat at long-range before exposing the assault rescue team to hostile fire. Because of their specialized training, equipment and long-range optics, snipers can also supply the following:

1. Good suspect Location / Stronghold Intelligence
2. Detailed Suspect Descriptions / Observations
3. Minute by minute up-dates on the Situation
4. Domination of the High Ground
5. Approach Security for the Assault Element
6. On-call availability of Precision Fire
7. The Long Range Option (One well placed shot)
8. The Low Light / Night Option (if equipped with night vision scopes)
9. Good Penetration on Barricades (heavy caliber .308 or .300 Win Mag.)
10. Reduced Danger to the Assault Element

### **LIMITATIONS**

There are also several limitations to the use of long rifles in a traditional law enforcement sniper role. One being that they are of little value on operations that take place inside high-rise buildings, hospitals or warehouses, where the inside distances are too short for the powerful optics and heavy calibers. To compensate, snipers equipped with light caliber scoped carbines such as the M-4 or SMGs such as the MP-5, can be deployed to dominate long corridors or large rooms, conference halls and storage areas.

Snipers are not the solution to all of the problems confronting an Incident Commander. There are times when snipers cannot, or should not be deployed. Before deploying the sniper element, there are several factors or limitations that must be considered. These include:

1. The distance from the nearest cover to the stronghold or suspect location
2. A suitable field of observation or fire for the snipers
3. The ability of the snipers to observe the suspect's movements
4. The snipers' difficulty or inability to relocate quickly in a dynamic tactical scenario
5. The potential for over penetration on soft targets or thin walls
6. The agency's policy and rules of engagement in engaging suspects known to be dangerous but not immediately threatening life.
7. The fact that executing the Sniper Option will still require an immediate follow-up assault
8. The time and budgetary obligation to ensure that snipers receive adequate and frequent specialized training

Apart from the fact that a sniper's bullet cannot be called back and the results are often terminal, the SWAT or sniper group commander should keep the above points in mind when considering the sniper option. Most tactical operations benefit from the deployment of snipers in some role, but an in-depth discussion as to the advantages or disadvantages of snipers for each particular scenario goes beyond the scope of this article.

It should be remembered that the snipers are just one of many "options" in the incident commander's proverbial toolbox. The tactical decision process of where and when to deploy the sniper elements will be made by the Incident Commander and/or the Sniper Group Commander. However, in many cases, since the snipers will often have the best picture of the unfolding situation, it will be up to the individual snipers to "advise" the command element on how they could be best utilized once they have moved up into a position of advantage.

## **SNIPER PROGRAM DEVELOPMENT**

Sniper training is structured around the two primary roles of the sniper – precision long-range shooting and long-range surveillance.

In shooting, the law enforcement SWAT or hostage rescue sniper aims to stop with certainty the life-threatening activity of the target. This is often achieved with one well-placed high-velocity round to the target's head, heart or spine from a distance of 50-150

yards – a very different situation to the high-speed, close-quarter defense-of-life gunfights of the street cop.

To have the skill, mindset and confidence to execute this type of shot requires many hours of disciplined training and coaching. When considered in light of all the other job-related skills of the sniper, it becomes apparent that an effective sniper program is one that requires time, energy and dedication on the part of the snipers, and financial commitment on the part of the agency.

A basic military sniper school will usually run at least six to eight weeks and the FBI sends their HRT snipers through the 8-week Marine Corps Sniper School at Quantico just to lay the foundation for future training. In contrast, the average law enforcement sniper school is usually concluded in a barely sufficient one to two weeks – since that is often all the time an agency will allow their personnel for training. The only reason that a basic police sniper school can be condensed into two weeks is that there is virtually no long-range shooting (300+ meters), range estimation, wind reading or prolonged stalking exercises as found in the military schools. Training concentrates on short to medium range shooting (50 – 150 meters), reporting skills and positive target recognition.

A "basic" school is exactly what it implies – merely a basis or foundation for future training and experience. It is not possible to fully train a sniper from scratch in one or two weeks, especially a special operations sniper tasked with complex hostage rescue scenarios. So, to reduce the need for longer sniper programs, and to maintain the efficiency and intensity of the training, it is essential that the instructor have good raw material to work with. This requires a professional approach to the selection of sniper candidates, and the future training of only those who show a genuine aptitude for the mission.

## **SNIPER SELECTION**

The selection procedure for any tactical or special operations team is usually a multi-level affair. First an individual qualifies and trains for the police academy before eventually graduating as a rookie law enforcement officer. From there he or she may volunteer for special duty with a tactical team so the selection committee will already have a two time volunteer and have had ample time to evaluate his or her aptitudes, fitness and shooting ability.

On the subject of shooting ability, not everyone is a natural shot nor may they have had the opportunity to show their potential ability. However, after a law enforcement officer has gone through basic academy and advanced patrol training, his or her demonstrated proficiency in marksmanship should begin to attract the attention of the instructors. Similarly, officers being considered for tactical teams should also have demonstrated and documented above average fitness.

In selecting sniper candidates, the following attributes should be considered:

1. A demonstrated shooting ability – preferably with a rifle
2. Good health and above average physical and mental fitness
3. Mature judgment with emotional stability and a calm, patient manner
4. Good eyesight, visual acuity and powers of observation

5. Good verbal communication skills
6. Non-Smoker with sober drinking habits
7. A demonstrated commitment to training
8. A dedicated Team Player
9. Above average intelligence and ability to grasp technical information

### **INITIAL SNIPER TRAINING**

The first phase of the snipers' training, law enforcement or military, should address the following topics:

1. The Role of the Sniper in LE Operations
2. Required Shooting Standards & Qualifications
3. Sniper Rifle Selection, Zero & Maintenance
4. General Ballistics & Bullet Performance
5. Rifle Marksmanship & Shot Placement
6. Data Logging
7. Standard Operational Procedures (SOP)
8. The Agency "Shoot" Policy (ROE)
9. Sniper Hide Selection & Construction
10. Communications Procedures
11. Intelligence Gathering
12. Command Fire Procedures
13. Simultaneous Fire Procedures
14. Low-light / Night shooting Techniques

### **ADVANCED SNIPER TRAINING**

Phase two of the snipers' development will be an advanced program that is designed to meet the mission-specific needs of the special operations team. These can be taught in a series of short courses or as one complete school. Subjects will vary from team to team, but may include some or all of the following topics:

1. Advanced Camouflage, Concealment & Stalking
2. Land Navigation & Fieldcraft
3. Range Estimation
4. Long Range Shooting
5. Moving Target Shooting
6. Sniper Initiated Assaults
7. Night Movement, Deployment & Shooting
8. Shooting Through Mediums (Glass deflection)
9. Aircraft Take-down Options

10. Dignitary & VIP Protection
11. Advanced Long Range Photography
12. Advanced Surveillance & Intelligence Collection

To complete the advanced sniper school, snipers should be required to participate in complex field training exercises (FTXs), involving stress, exertion, prolonged observation and hold-on, sniper commentary, a sniper initiated assault option, and overwatch of hostage/prisoner reception.

In conclusion, it should be obvious to the reader that sniper training is a serious commitment in both time and resources, and the best way to off-set liability is to be able to document the sniper selection process supported by adequate professional instruction, training and standards.

In Part 2 we will look at this subject covering the set-up and zero of the sniper rifle and the importance of logging shooting information for tactical reference or defense against civil litigation. In almost every sniper involved shooting, internal investigation is inevitable and, rightly or wrongly, civil litigation is highly probable.

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**THE LAW ENFORCEMENT SNIPER  
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**Part 2**

**By**

**Mark V. Lonsdale**

Reducing Liability Exposure through the use of Select Personnel,  
Professional Training and Superior Weapons Systems

*Note: Part 1 looked at the liability in deploying untrained or even poorly trained marksmen in a law enforcement sniper role. This part will look at the potential liabilities incurred with substandard rifles and equipment, and failure to adequately set-up and zero these weapon systems.*

Even the best-trained snipers, if issued substandard weapons or ammunition, are a liability to the department or agency. Similarly, top-of-the-line sniper weapons that are not correctly set-up and zeroed are also a potential liability. In both cases, an incident that would be a totally justified shooting or use of deadly force could easily become a wrongful death when that high velocity .308 round intended for the hostage-taker or terrorist hits the hostage or an innocent by-stander.

This is where the “system” approach is so critical to sniper operations. The rifle, the sights, the ammunition, the accessories and the shooter must all come together as an effective and consistently accurate shooting system.

## **SNIPER RIFLE SELECTION**

The task of selecting a sniper weapon system has been both simplified and complicated in recent years by development in the US arms industry. There are now several well informed companies, and a few not so informed, building sniper rifles and a wide variety of related accessories intended for law enforcement and military applications. Companies such as McMillan, Robar and Tac-Ops have become synonymous with sniper rifle accuracy and reliability, just as Leupold has become synonymous with precision optics and Badger Ordnance with high quality bases and rings. However, just as there are many companies in the sniper rifle business, there are equally as many philosophies as to what constitutes a good sniper rifle.

Where some manufacturers promote a lightweight, minimalist approach to sniper rifles, other rifle builders create overweight weapons systems burdened with every accessory they can jam into the package. Correspondingly, prices can range from an acceptable \$2,000 - \$3,000 all the way up to \$10,000 with all the bells and whistles.

Somewhere in all the hype, slick brochures and accessorizing, the potential buyer must decide what is best suited to their operational needs – usually driven by the anticipated mission(s). However, because of the variety of sniper missions, for example short-range urban-police or long-range mountain or desert-military, the buyer must be somewhat informed as to which weapons systems and optics work best in their assigned jurisdiction or environment.

In general, the sniper should avoid overly specialized mission-specific equipment that can limit the types of missions on which it can be used, and go with equipment that offers some operational flexibility. Therefore, to make this selection, the prospective buyer should have a working knowledge of the essential features and desirable options available for both general and mission-specific applications.

## **ACCURACY**

The first feature that all sniper rifles should possess is accuracy. In fact, to go a step further, the modern sniper rifle is built around not just accuracy but the concept of consistent **Cold Shot Accuracy**. That is to say, the first round out of the barrel must hit the desired mark every time. The emphasis on first round accuracy is logical, since most often the special operations sniper will only get one opportunity to neutralize the target – and that will be out of a clean, cold barrel.

To achieve this, the shooter must first embrace an important maxim: "Accuracy is the product of uniformity." In more practical language this means that the sniper must endeavor to eliminate all the variables in his weapons system, ammunition and shooting technique, leaving only the weather elements with which to contend.

Now it is not the intention of this article to turn the reader into a weapons engineer or ballistics technician, but it is essential that a sniper, LE rangemaster or instructor have a more in-depth understanding of precision weapons systems than the average patrol officer or grunt. Snipers and Instructors in particular, because of proven shooting ability and affinity for precision weapons, will often be called upon to evaluate or express an educated opinion on a particular weapons system.

The first practical application of this knowledge and experience is during the procurement process. The tactical team should have the ability to evaluate a new weapons system for future purchase and to establish its suitability for specific missions. When it comes to sniper rifles, who better to evaluate weapons than those who must use them – the sniper element.

The snipers should also be adept at documenting their findings and test results to best make comparisons in weapons systems. Three reasons for the documented testing of weapons systems are:

1. To ensure that a potential purchase does in fact meet the team's requirements and the manufacturer's claims
2. To then better track the comparative strengths and weakness of various weapon systems for future reference
3. To monitor deteriorating accuracy in an ageing sniper rifle

## **WEAPONS TEST & EVALUATION**

To adequately evaluate a weapon, one does not need to be an engineer or scientist, but one should have a "scientific approach" to testing. That is to say that variables must be minimized and testing must be done logically, systematically and under the same conditions for each test weapon.

Before requesting weapons for evaluation, make a list of the essential features and required performance that would be considered necessary to meet the team's operational requirements. For instance, a team may require a sniper rifle that has a synthetic stock; a 20"-24" match-grade stainless steel barrel suited to the 168-grain BTHP match projectile; minimum 5-shot magazine capacity; a bedded action and floated barrel; a maximum weight not to exceed 14 pounds; an Anschutz-compatible accessory rail; a variable scope with mil-dot reticle; a rigid mounting system; and an accuracy of 1/2 (0.5) MOA or less. By specifying all this in the pre-bid criteria, time will be saved by having only qualified weapons systems submitted for testing.

Upon taking delivery of a T&E weapon system (new or used) immediately inspect it for damage in transit or from previous use and abuse. Then ensure that all the required tools and accessories are enclosed with the weapon. If there is damage, call the manufacturer and notify them of the problem. Periodically T&E weapons are shipped directly from one unit or agency to another so as to meet test schedules and deadlines.

The next order of business, and a very important one, is to check that all action and scope mounting bolts are secure and torqued as necessary, the barrel float channel is clear of debris, and the scope is clean and clear. It is also advisable to check that the scope click adjustments are crisp and positive. Finally, thoroughly clean the bore in the manufacturer's prescribed manner and minimally lubricate appropriate moving parts. There is no telling what abuse some "gun writer" or military unit subjected a T&E weapon to in the course of their testing.

If several weapons are to be tested and evaluated, it is advantageous and time effective to test them all at the same time. In this way, they are being shot by the same shooters, from the same positions and under the same environmental conditions with the same ammunition. It would be unfair to the manufacturers to have one test rifle

evaluated by a top shooter over a bench-rest, under ideal conditions, and then to have another rifle tested by a relatively inexperienced shooter over a log behind his barn, on a windy day.

Where realistic tactical training takes place at a variety of ranges and conditions, initial accuracy and comparison testing should take place under ideal conditions (morning, no wind) on a 100-yard bench-rest type range. All weapons should be tested with both the manufacturers' recommended ammunition and the team's issue match-grade ammunition. Test ammunition should come from the same lot number, and if possible, the weapons should be tested with the same optical sight and power setting (magnification). Again, it would be unfair to evaluate or compare one rifle with a low-cost 4X sport scope and another with a 24X precision bench-rest scope. At OS we do all testing at 10X magnification.

In testing a sniper rifle, the shooter should be interested in primarily five aspects:

1. Overall quality of materials, workmanship and rugged construction
2. Ergonomics, comfort and how it fits the shooters
3. Reliability of function / no miss-feeds or jams
4. Ability to shoot consistent tight groups – accuracy
5. Ability to make the required cold shot from a clean barrel – consistency

If the rifle is not well built from quality materials then it is not worth testing. If it is too heavy, bulky or uncomfortable to shoot, then why continue. If loading, feeding and ejection are not reliable then it is not a "tactical" weapon. If it cannot group or place a consistent cold-shot then it is not sniper-grade.

After cleaning and zeroing the weapons systems, start off shooting five-round groups and recording the results. Measure and log each group on the test sheet for each rifle. After three or four groups clean the bores, allow the rifles to cool, and shoot one cold shot from each weapon. Again, measure and record the results.

Testing should be done on a minimum of three different range sessions, to get in the required cold shots, with ample time to allow for cleaning and cooling. It is also advantageous to have at least two or three experienced shooters shoot each rifle and give their personal and professional impressions. All snipers and instructors have some personal biases and expectations when it comes to weapons, but these should not cloud the objectivity of a test session. Just because the rifle design is innovative, or has a different feel, or the distributor is a pushy salesman who knows diddly-squat about sniper rifles, this is no reason to fail a weapon.

When the testing is completed, clean the weapons and return them to the manufacturers with a letter of appreciation and a copy of your test results. If the rifle failed the selection, they may want the opportunity to make changes and re-submit an up-graded version; or they may be willing to customize a rifle to meet your criteria. Keep in mind that it is the private sector that develops new weapons systems, not the special operations community. Let the gun builders and engineers know specifically what you need and they may surprise you by exceeding your expectations.

Finally, keep an open mind when testing weapons and allow the results to speak for themselves. OS and STTU routinely test new weapons systems for no other reason than to keep abreast of developments and better understand changes in technology. New materials are regularly being tested for weapons applications, and private industry is constantly trying to meet the mission-driven demands of the special operations community.

For a better insight into material and technological advances, one only has to look at the Directorate of Contracting (DOC), Aberdeen Proving Ground, list of proposals for innovative research and development projects in support of special operations forces (SOF). These include: high speed / low detectability mobility platforms; low volume personal equipment; multi-spectral man-portable vision devices; miniature long range destructive systems that are man-portable; enhanced explosive charges and munitions; low probability of detection communication systems; lightweight low volume day/night sights and fire controls for SOF weaponry; and the list goes on....

## **ZEROING**

After two decades of spreading the gospel, "Accuracy is the product of uniformity", we continue to come across designated snipers who have no clue about precision shooting. Although it is hard to believe, and even harder to understand, we find snipers who do not have their rifles correctly zeroed; do not know how to zero their rifles; do not understand how the scope adjustments work; change ammunition without re-zeroing; or do not know how to use "Kentucky windage" for ranges other than the overly familiar 100 yards.

This being the case, initial training sessions should begin with an opportunity to confirm the zero of all weapons. Or in the case of new weapons to get them on paper and establish an initial zero – usually at 100 yards.

To zero a weapon, take 20 rounds of duty issue match-grade ammunition, set a large clean target out at 100 yards, establishing a suitable supported-prone or bench-rest shooting position with a padded rest, sandbags or a bi-pod. Next, go through the following routine:

1. Check that all action mounting bolts and scope base and ring screws are secure and torqued to the correct inch-pounds
2. Check that the bore is clean, dry and unobstructed
3. Ensure that you are utilizing match-grade duty ammunition
4. Bore sight the weapon or use a collimator to get a rough zero
5. Load the weapon and from a comfortable, stable position, fire two shots at the selected target
6. Make scope adjustments as indicated in the scope manual by rotating the dials in the direction of the desired bullet impact
7. Shoot two more rounds, continuing in this manner until the point of aim (POA) and point of impact (POI) coincide
8. Shoot a three round group to confirm the zero
9. Loosen the locking crews; reset the elevation dial on the scope to "0" (or 100) and the windage dial to ""0", and retighten locking screws.

10. The rifle is now zeroed for 100 yards with that particular ammunition ONLY.

How much one moves the scope adjustment dials between shots will be dictated by the click adjustment graduations of that particular scope. If the scope has 1/4" clicks and the first rounds are 3" low and 5" left of center, then the elevation dial will need to be moved 12 clicks UP and the windage dial will need to go 20 clicks Right.

Some scopes are not so simple. Some long range scopes such as the Leupold MK4 LR M3 has 1" clicks on elevation and 1/2" clicks on windage. So if shots are 6" high and 7" right of POA, then the shooter must move the elevation dial 6 clicks down and 14 clicks left. Many European scopes such as Zeiss, Kahles and Schmidt & Bender utilize 1-centimeter (cm) adjustments that are equal to 0.3937 inches (0.4" for working purposes).

If like the MK4 LR M3, the scope has a ballistic cam or calibrated range drums, then the scope must be zeroed with the matching ammunition (ie Federal Match .308 Win 168gr, 175 gr, or .300 Win Mag 190gr). The zeroing will usually be done at the minimum distance indicated (100 or 200 yds/m), then the drums adjusted to line up with the required indicator markings.

At this point, the military and police snipers may part ways. The conventional military snipers may choose to re-zero and set their scopes for a 500 or 600-meter battle zero but log all distances between 100 and 1,000 meters. Police snipers will opt to use 100 as their standard scope setting, but must then shoot at 25 or 50 yard increments out to 300 to log either their click adjustments for each distance, or the necessary hold-over (usually 4"-5" at 200 and 15"-16" at 300 for a .308, depending on ammo and barrel length).

## **DATA LOGGING**

For law enforcement snipers it is important to document all practice sessions and qualification shoots for legal record and to off-set liability exposures. For all snipers it is important to log weapons information, shooting data and environmental conditions for future reference.

There are several factors that can affect the accuracy of a weapons system and cold-shot placement. When any one of these conditions changes, for example the type of ammunition, air temperature or elevation, the bullet POI will shift from the POA. By logging data from all training sessions, the sniper will develop a reference database that will better prepare him or her to anticipate the changes in bullet impact with the changes in environmental shooting conditions.

The information that the sniper should be logging for future reference includes:

1. The weapon system / serial number / caliber / barrel length
2. Ammunition / projectile type / lot number
3. Scope / power / range setting
4. Shooting position: sling, bipod, tripod or sandbag
5. Distance to target

6. Wind: direction and strength
7. Environmentals: temperature / altitude / lighting / slope angle
8. Cold shot point of impact (POI)
9. Second shot POI
10. Five shot group size
11. Results at various ranges
12. Total number of shots fired for the training session
13. Changes made to the rifle or scope
14. Clean or fouled bore

Armed with this information, collected over a period of time, under varying conditions and in several locations, the sniper will begin to better understand external ballistics and gain the experience to be a more consistent shooter. The sniper data logbook will also give a record of the rifles accuracy, or loss of accuracy, and an indication of when a new barrel may be justified.

### **CONCLUSION**

If there is a secret to becoming a competent professional sniper it is familiarity with the weapon system and regular training. This requires that an agency allocate adequate time and funds for training or they will be exposed to further liability.

So a final word of advice – Print and photocopy this article, along with Part 1, and pass them up the chain of command to your supervisors, commanders and administrators. In this manner they may see the light and allocate more funds for training and better equipment, thus reducing their liability.

**“Train with a Purpose”**

END

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