



Duty Gear Training Guide

History

History of Security Holsters

In the last 10 years 660 police officers have been killed in the line of duty in the United States. 68 of those officers were disarmed and killed with their own handguns. This averages out to slightly over 10 per cent. In the early 1960s the rate was much higher. During the period from 1960 to 1970 around 16 per cent of the officers were killed with their own weapons. The FBI's Uniform Crime report does not keep records on those officers that were only disarmed and assaulted, or compromised in some way by being disarmed. However that number is estimated at being at least three times as great as those officers killed. In many of those cases the subject escaped and used the officer's weapon in a later crime.

In the late 1960s several holster companies began to offer "security" models in their line of holsters. It was believed that officers were losing their weapons from the rear in surprise attacks. Those security designs focused on offering added resistance from someone trying to draw the weapon straight up or up and back. Most of the new "security" designs became front break models. In order for the officer to draw his weapon after releasing a strap mechanism, he would rotate the weapon slightly forward to release the weapon. The front break holsters became very popular and are still used by many departments today.

In the early 1970s, Bill Rogers, former FBI agent and founder of the Rogers Holster Company, studied and tested all of the existing duty holsters to see which design was best before he began to design his uniform holster product. To make matters simple he used an average size human male and mounted the duty gear and holster on the test individual the way it would normally be worn. A second average size male, in this case Rogers himself, was allowed 20 seconds to exert as much force as possible in any and all directions to the grip of the weapon. The test individual was not allowed to interfere nor was he allowed to secure the gear in any way. In many cases the test individual was pulled to the ground but that did not stop the test. Twenty seconds turned out to be a long time and in reality if the holster survived in the first 5 seconds it normally went the full time. For this reason the test was shortened to 5 seconds. The attacker was allowed to use both hands but the force was applied only to the grip of the weapon. It was clear from the beginning that if the attacker released the primary safety strap that the test would be very short indeed. For this reason the attacker would not intentionally try to release the primary safety device. If the primary safety device was released accidentally it was noted and was considered a negative in the over all design, but the test was done a second time. If the weapon could be dislodged from the holster without intentionally releasing the primary strap or if the weapon and holster could be torn completely from the belt, it failed the test. Rogers discovered that none of the holsters of that era would pass this simple test. Most failed instantly, so quickly in most cases that

the average person could not react fast enough to prevent the loss of the weapon even if they tried. The popular front break holsters of that era were some of the easiest to defeat. By simply grabbing the weapon from the front and rotating forward with a quick force, the weapon would easily pop out.

Rogers further studied the retention value of all of the holsters with the primary retention device released. Many of the holsters of that era would lose their weapons in this condition if the wearer would fall abruptly forward or backward. Most of the front break holsters did well with this test because they still had a good grip on the weapon, while the standard top draw holster had little or no retention. Two tests were used. One consisted of running forward and falling in a push up position. The second was a simple backward summersault. If the weapon fell out of the holster, it failed the test. For obvious reasons this test was abbreviated to simply holding the holster by the belt loop and turning the gun and holster upside down and lightly shaking.

Finally Rogers tested the holsters again with the primary securing device open to see what if any retention value remained from the standpoint of an assailant trying to remove a weapon from an unlocked holster. Only those holsters, which retained their weapons in the inverted shake test, were tested in this final test. This test proved to be difficult to judge and was somewhat subjective. The front break holsters offered resistance from the rear but none from the front. A good, tight fitting, top draw holster with a sight track and tension device offered some resistance from some directions but would easily allow removal in an upward motion.

Rogers concluded, after weeks of testing, that a duty holster should not fail by having someone forcefully pulling on the grip of the weapon in any direction. Secondly, if the primary securing device was open, the weapon should not fall out of the holster in the inverted shake test. Passing these two tests became the standard for a level 1 holster, which Rogers felt, was the minimum requirement of a duty holster. Unfortunately there were no holsters of that era that would pass a Level 1 test. Very few holster models today, other than Safariland's holsters, pass a Level 1 test. Rogers further decided that if a holster could pass a Level 1 test it could be subjected to additional tests with the primary safety device open. If the holster had an additional design or device that offered some measure of security when the primary device was open, then it was judged to be a Level 2 holster. In 1974 there were no Level 2 holsters because none passed a Level 1 test.

In 1974 Rogers designed the first holster which would pass a Level 1 test as previously defined. In 1975 he developed the first Level 2 holster known as "The Boss". Around 1978 Rogers developed another Level 2 holster, named simply SSII, which eventually evolved into what is now known as the Safariland 295. All of Rogers' duty holsters were based on front break or forward unlocking designs. It was generally believed that officers were being attacked and losing weapons from

the rear. The front unlocking designs offered excellent protection from rear attacks. Even though the front break holsters had become very popular in the early 1970s, the Uniform Crime Report showed only a decline of 1 percent of officers killed with their own weapons during the period of 1970 to 1980. Around 1983 an incident occurred which prompted Rogers to research this matter further. A police officer in Florida was disarmed from the front while wearing a Rogers SSII. During the struggle the thumb release strap was released. The officer was able to break away from the subject who was in front of him but the subject had drawn the weapon through the front of the holster and was holding it up side down. Fortunately the officer was able to disarm the subject before a shot could be fired. Rogers gathered information through his contacts with the FBI and the Uniform Crime Report. He also used case studies recorded by the Florida Department of Law Enforcement and other state agencies. From all of the information gathered, Rogers was convinced that the real threat of losing a weapon was from the front or side direction, not the rear. Even in cases where the officers were initially attacked from the rear, they immediately turned into the attack before trying to break away. In all those studied, only two officers were determined to have actually lost weapons from the rear. In recent years prison inmates have been filmed practicing holster disarming techniques which use a frontal assault, twisting and pulling up and forward on the grip of the weapon. Investigation in to gang activities has discovered the same disarming techniques. This recent intelligence has substantiated the research that Rogers had done almost twenty years earlier. Based on that early research, Rogers went to work designing a holster that was grab resistant from the front and side. That final product not only passed his Level 1 test; it also passed his Level 1 test with the primary securing strap open. It had a second securing strap that went around the middle of the holster that secured the weapon even when the other strap was open. Even with both straps open, the holster offered excellent retention from the front and the side by locking on the cylinders of the revolvers and ejection ports of auto pistols. It could pass a Level 1 test with either strap device unlocked and still offer dramatic retention from the front or side take away with both straps released. With three security systems in place and able to pass a level 1 test with either snap released, it was the first, level 3 holster. It was named simply the SSIII. The SSIII holster sold by the Rogers Holster Company and later by Safariland became the most popular "security" holster in the world. It has had numerous documented saves to its credit and has been regarded by many as responsible for bringing down the percentage of officers killed with their own weapon in the last ten years to around 10 percent. Its design has been emulated but not duplicated by most of the other holster companies. In the early 1980s Rogers petitioned the Chief of Police organization to study his security rating system and adopt it as a standard for the industry. Because the Rogers Holster Co. had the only holsters that could pass a Level 1, 2, or 3 test, it was determined to be "inappropriate" for that organization to adopt such a standard. Several years later, Safariland Ltd. Purchased the Rogers Holster Co. along with numerous patents including the SSII and SSIII. Neale Perkins, owner and President of Safariland Ltd. took a similar approach trying to get

the industry to adopt the security system. However, to date, Safariland Ltd. only honors the system and method of testing. Some other companies claim to have "three levels of security" but usually do not pass a Level 1 grab test. When Rogers sold his company to Safariland in 1985, he kept his key design people and formed a design and engineering company called Rog-Con Inc. Rog-Con Inc designs holster products exclusively for Safariland and are responsible for most of the uniform duty holster designs that Safariland markets. In the early 1990s a trend was noted in reported disarming assaults. Police officers who had drawn their weapons and then decided that the situation did not call for deadly force were being disarmed as they tried to lock their weapons back into their holsters. A second alarming problem due to the major transition from revolvers to semi-auto pistols was the high incidence of accidental discharges caused when officers reholstered during stressful situations. In some cases it was determined that the officers had totally miss aligned their weapon with the holster and allowed the hammer strap to enter the trigger area. The officer leaving his trigger finger near the trigger area caused a second and more common accident and having it caught by the side of the holster when he pushed the weapon down. Most top draw type holsters in the industry either angled the weapon straight down or allowed the officer to adjust the cant of the weapon. In many of the accidental shooting cases the officers were severely wounded and crippled because the bullet entered the upper thigh or knee area. Safariland adopted a fixed cant in their uniform holster line that positioned the muzzle so that an accidental firing while holstering in a standing position would place the bullet slightly behind the officer.

SAFARILAND Duty Gear Holster Retention Comparisons

Blank=N/A Marginal=1 Good=2 Very Good=3									
2	X	X							
200	X	X							
2005	X								
295	X	X							
2955	X	X							
070	X	X							
0705	X	X							
6280	X	X							
6285	X	X							
Threat Level 1 - Moderate									
Threat Level II - Optimum									
Threat Level III - Maximum									
High Ride Belt Loop									
Standard Belt Loop									
1 1/2" Drop Jacket Slot Belt Loop									
Pull up - all snaps closed									
Pull from front - all snaps closed									
Pull from side - all snaps closed									
Pull from rear - all snaps closed									
Pull up - all snaps & straps open									
Pull from front - all snaps & straps open									
Pull from side - all snaps & straps open									
Pull from rear - all snaps & Straps open									
Level II & III - Pull up; 070 & 295 thumb-break snap open; 6280 & 6285 hood pressed down									
Level II & III - Pull from front; 070 & 295 thumb-break snap open; 6280 & 6285 hood pressed down									
Level II & III - Pull from side; 070 & 295 thumb-break snap open, 6280 & 6285 hood pressed down									
Level II & III: Pull from rear; 070 & 295 thumb-break snap open, 6280 & 6285 hood pressed down									
Level III - Pull up; 070 trigger guard snap open, thumb-break snap closed									
Level III - Pull from front; 070 trigger guard snap open, thumb-break snap closed									
Level III - Pull from side; 070 trigger guard snap open, thumb-break snap closed									
Level III - Pull from rear; 070 trigger guard snap open, thumb-break snap closed									
Extra clearance for winter jackets									
Holster tension screw									
Maintain gun with all snaps undone while running									
Ability to reholster and resecure quickly									
Clearance for magazine release button									
Full access to grip of firearm before drawing handgun									
Totals									

For additional information, please read reverse side.

Although no duty holster is "snatch-proof", weapon retention should be one of the primary objectives for any holster manufacturer. Unfortunately, some holster companies are still selling holsters that will "give up" their gun with one quick yank on the stock of the handgun. It is clearly understood that if the officer can unlock the holster and draw the weapon, someone else knowledgeable could also do the same during an assault. Most assaults of police officers come from people who do not have a complete understanding of the holster. The ease with which the release mechanism can be released has been a controversy for years. If the release is made so that it is difficult for an attacker to accidentally open, it is also more difficult for the officer to operate. Safariland has designed its duty holsters so that the release mechanisms are less likely to be opened accidentally. The holsters therefore require more practice and experience to operate than many of our competitors' models.

Safariland's duty holsters are not only designed with the officer's safety in mind; they are built to last. Many of our competitor's holsters, if allowed to get wet, will deform and lose their structural integrity. We invite you to test our holster against a competitor's model by soaking both in a solution of warm water and laundry detergent. A couple of minutes are all that is necessary. Take the holsters and conduct a snatch test described below while they are both wet. This abuse is equal to a year or so of actual use in the real world.

No industry standard exists to rate a holster's ability to resist weapon takeaway attempts. For that reason, Safariland has developed a simple system of rating a holster's retention level. The tests described below were used at Safariland to rate our own holster designs. You can perform your own tests on our holsters to validate our rating and you can also conduct the same tests on other company's holsters. Safariland's rating is for holsters in new condition. An excessively worn, damaged, or otherwise defective holster would not be expected to pass the security tests. An experienced defensive tactics instructor should supervise the tests, to insure against physical injury. The holster, with the unloaded weapon, should be mounted on an appropriate duty belt and secured to a volunteer, as it would be normally worn. The volunteer is not allowed to hold onto the weapon, holster, or the belt during the test. The mounting of the gear to an immovable structure is an unrealistic test and should not be done. The "attacker" has five seconds and can use both hands to apply force to the stock of the handgun. No intentional force should be applied to the release strap mechanism by the attacker in the direction that is normally used to open the strap. If the gripping of the stock of the handgun by the "attacker" results in the accidental releasing of the strap, it should be noted as a negative in the overall design of the holster. This foregoing test is designed to measure the structural integrity of the securing strap mechanism and the holster itself. Following are the tests to be used to determine a holster's retention level:

LEVEL I

1. Pull as hard as possible on the stock of the handgun in any and all directions while violently twisting the weapon in any and all directions. If the weapon remains in the holster and the holster remains on the belt, make a normal draw to insure that the securing mechanism cannot be jammed by force. If the holster still works properly go to the next test.
2. Remove the holster and belt from the volunteer. If the holster has a tension device available, be sure that it is adjusted properly. Release all external straps and invert the holster with a light shake. The weapon should not fall out of the holster.

If tests 1 and 2 are successful, then the holster is rated as a Level I.

In order for a holster to be tested for a Level II rating, it must first pass the Level I tests. If the holster failed the Level I test, then it has no rating and is considered only a duty holster.

LEVEL II

With the primary securing device unlocked, apply force in the following directions: Pull forward. Pull straight up. Pull out towards the side of the holster. Pull from the back of the holster. If the holster has an additional device which offers a measurable degree of security in any of the directions, it is considered to have a second level of retention or Level II. See the reverse side of this chart for a more detailed description of this test as they apply to our holsters.

LEVEL III

For a holster to be rated a Level III, it must have two securing devices that independently secure the weapon during the Level I tests. If the holster offers additional retention with both securing devices open, then it has a rating of Level III.

Recently Safariland has designed holsters that have the ability to re-position the weapon or strap mechanism into a more secure position after being dislodged. These models carry a + (plus) sign after the Security Level to indicate their enhancement.

Disclaimer

No holster should ever be considered "snatch proof". If the wearer can draw the weapon, it should be assumed that an assailant could also remove the weapon from the holster. A security holster should never lessen retention tactics. Safariland rates their duty holsters by model design. Individual weapons within a model have slightly different retention characteristics due to the configuration of the weapon. It is ultimately the user's responsibility to insure that his or her holster operates properly, is properly maintained, possesses the security function, and operates efficiently and properly.



Construction

What is Safari-Laminate®?

In the early 1970s Bill Rogers pioneered the use of synthetics to build his holster designs. Leather did not provide the strength necessary to survive the destructive security test. Rogers developed the patented process known as the thermo-laminate process. In the process, a thermo-formable plastic material known as Kydex, suede lining and outside finish material were all coated with a liquid Nitrile rubber compound. Once the rubber cured it could be handled without bonding to itself. The big pieces of coated material were then die cut. The cut parts were assembled together with T-nuts inserted along with any additional reinforcement material. The assembled part was heated to about 300 degrees and pressed together vulcanizing the entire part together. The final laminated part was bonded so well that the strength of the part was significantly greater than the sum of the individual strengths. This same phenomena is well known with materials such as plywood and fiberglass, but had not been discovered in the field of holster design until this time. The laminated part was then die cut to an exacting pattern and stitching was added for aesthetics. The part was then re-heated to 350 degrees F and placed on a metal mandrel, which had the general shape of a weapon. This unit was then sandwiched between two layers of foam rubber and pressed until the material cooled. Once stabilized the part was removed from the mandrel and finished. The finished holster had the following advantages over a leather holster:

1. Its molded shape would not stretch, deform or change shape.
2. The holster would not crush like leather holsters that had internal metal supports.
3. Because of the rigidity of the sides, a tension device provided a better clamping force on the weapon.
4. Because of the inherent strength of the laminate, the holster could be made thinner and lighter than a leather model.
5. Because of the strength and rigidity of the laminate, locking devices could be simply attached inside the holster allowing the weapon to be mechanically secured in the holster.
6. The single most important advantage of the laminate was its strength. Because of its ability to hold a shape under extreme pressures, it provided protection to the weapon many times greater than any other material. Air spaces around critical parts such as sights, slide stops, take down levers, and

magazine releases were formed to provide even greater protection. In the late 1970s, the Rogers Holster Co. used to demonstrate this feature by striking an aluminum model of a pistol with a hatchet while it was in a leather holster, a Nylon holster, and a Rogers's holster. The model was deeply cut in the first two holsters and never showed a mark in the Rogers laminate holster.

As the Rogers Co. continued to manufacture their thermo-laminate holsters they continued to experiment with alternative materials. A variety of synthetics and natural materials were tested. In the end two very important facts were realized. Natural suede leather was found to be the best lining material, and a synthetic leather material made from a urethane was determined to be the best outside finish material. The patent issued to Rogers prevented others from making a laminate of like materials.

The process generally described above was granted as a patent to Bill Rogers and the Rogers Holster Co. In 1985, Safariland Ltd. bought the Rogers Holster Co. along with numerous design patents and proprietary processes. Bill Rogers formed a design and consulting firm, Rog-Con Inc. Since that purchase, Safariland's Research and Development team have made many refinements to the original thermo-laminate process now known as Safari-Laminate®. Over the years they have learned a great deal about the use of these materials. The experience of having products used all over the world in every climate and dating back to 1973 has given Safariland the knowledge that no other company can possible have.

Advantages of Safari-Laminate® over Leather

Although top grain finish leather has been used since the beginning of holster construction, it has not proved to be the best material when using the thermo-laminate system. Leather, as an outside material must be able to stretch a great deal to conform to the various shapes of weapons. The Kydex®, when it is at forming temperature, can easily stretch to shape. The supple suede and layers of bonding rubber have no problem conforming to radical shapes. Top grain leather, on the other hand, does not stretch well unless it is wet. Wet leather is not compatible with a process that requires heating the part quickly to 350 degrees F. Top grain finish leather varies in flexibility, hardness, and thickness from batch to batch. Finish leather is easy to mar accidentally and once it is marked, even with just a fingernail, can never be totally repaired. The related production problems and high rejection rate caused the end product to be expensive. All of these problems led Rogers to adopt a synthetic material. The material was originally produced in England to replace leather on soccer balls. Leather soccer balls absorb water on a damp playing field and become heavy, changing their playing characteristics. This synthetic leather, named Porvair, was developed by the Inmont Corporation. It has no affinity for moisture, but breathes slightly, due to tiny pores produced in the process. These pores allow the product to be edge dyed and wax burnished. The material is several times more scratch resistant than natural leather and serious marks or dents will literally disappear in a few minutes. The material can be cared for like leather with a matching color shoe wax and brush. It is important that it be nourished occasionally with some synthetic preservative such as Armorall. Porvair is thermo-formable at compatible temperatures with Kydex®, and under normal conditions is much tougher than leather and easier to care for.

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