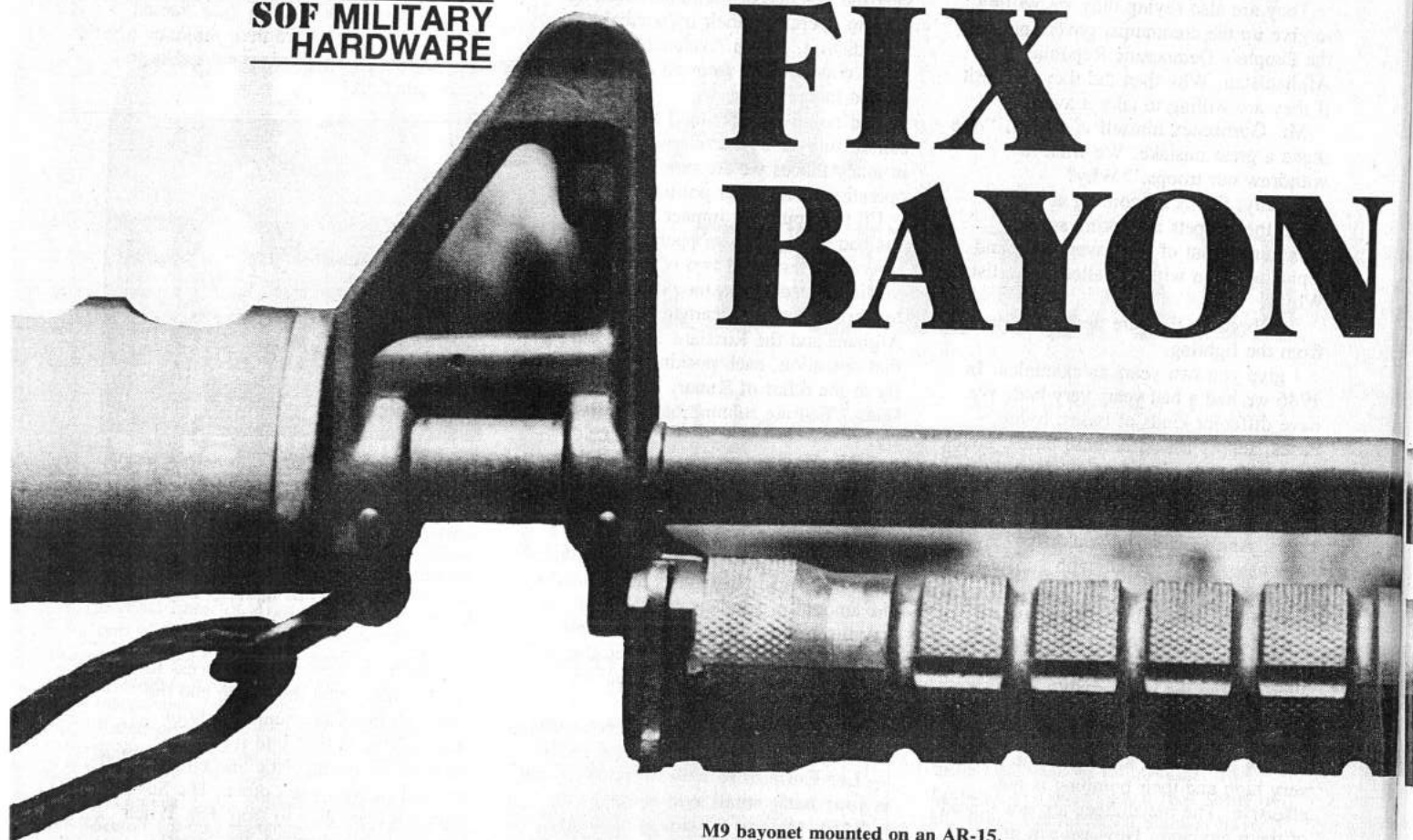


**SOF MILITARY
HARDWARE**

FIX BAYON



M9 bayonet mounted on an AR-15. Bayonets have their uses, but are they an anachronism on the 20th-century battlefield?

DOES THE ARMY KNOW WHAT IT NEEDS?

The new M9 Multi-Purpose Bayonet System fulfills the Army's specifications to the letter and can exceed most performance specifications by 100 percent or more. By adopting the M9 MPBS the Army got precisely what it wanted; I'm just not sure that what the Army wanted is what the Army needed. While Phrobis fulfilled Army specifications handily, I'm critical of some of the specifications in the first place, such as the weight limit and the wire cutting and saw requirements.

In an effort to get the Army's side of the story on the original specifications, SOF asked me to try to track down how the Army arrived at them. One would think I was asking for plans for the Stealth bomber. A call to Phrobis got me the name of the procurement officer at Picatinney Arsenal. I called him but he refused to tell me anything without going through a public affairs officer (PAO) in Washington, DC. I called him

and he referred me to a PAO back in Picatinney. I called him and he promised me the information within a week. A week later he referred me to another PAO at Fort Benning. The PAO at Benning then referred me to a project officer at Benning. After more than a week of unreturned calls I finally reached the project officer. He was generally surly, evasive and only reluctantly cooperative in answering my questions.

Regarding weight specifications, he said that the proposed bayonet was required to do more than the M7, so they allowed it to weigh an *arbitrary* amount more. When I gave my opinion that 1.8 pounds was excessive considering that the M7 bayonet with scabbard weighs only about a pound, he said it was not excessive because the M9 replaced the M7 bayonet, a field knife (the Army does not issue a field knife) and a wire cutter.

I then questioned why they had required the wire cutter capability. He said because they knew it could be done and there was a need for a wire cutter. I was tempted to ask him why they had not specified it also include a folding tooth-

brush since they knew that could be done and there is a need for the soldier to brush his teeth, but I didn't.

When I made the observation that I found the M9 MPBS to be an awkward, inefficient and tactically unsound wire cutter, he said that it was never intended to be a tactical wire cutter. That would be done with explosives. He also said that the M9 MPBS was not intended to replace the normally issued wire cutters but only to be used when none were available, since every soldier was not issued a wire cutter. I neglected to point out that every soldier was not issued a bayonet either. Since we had now established that the M9 was not too heavy because it replaced the wire cutter, but that the wire cutter was not replaced by the M9, I moved on to the saw.

I mentioned that I found the saw to be nearly worthless at cutting wood, in spite of the original Army requirement that it do so. He said wood should be cut with the knife edge, and the saw was meant primarily for aluminum and Plexiglas. Since a soldier cutting his way out of a downed aircraft is a one-in-a-million happening versus his almost dai-

IN February 1987 the U.S. Army began receiving its first deliveries of the new Phrobis III-designed M9 Multi-Purpose Bayonet System (MPBS). The idea for the M9 MPBS was born when the powers-that-be in the Army finally realized that the bayonet is rarely used by combat soldiers as a weapon, but is used much more often as a

tool. In fact, if bayonets were only used as weapons, most soldiers wouldn't bother to carry them. The M9 MPBS is designed for mounting on the M16A1 and A2 rifles, but it's intended to be far more than just a bayonet.

The current-issue M7 bayonet, which the M9 will eventually replace for all close-combat type troops such as infantry, combat engineers and Rangers, is far from state-of-the-art as a knife or a bayonet. First, it rusts easily. Second, many M7s have been produced with improper edge bevels combined with blades so hard that they can't be sharpened conventionally. This gave them the

were a series of performance requirements. Most important were that the system must perform as a bayonet, field knife and wire cutter; it must be able to cut double twisted barbed wire, standard metal bands and ribbon-type barbed wire as well as stand up to a charge of 240 volts when cutting electrified wire; the saw back must be capable of cutting through light sheet metal and a .5-inch hemp rope, and saw through a 1-inch piece of hardwood; and the blade must be readily sharpened with an attached sharpening system.

Entries were submitted by six firms: three in the U.S. — Imperial, Phrobis and S-Tron; and foreign entries from Eichhorn of West Germany, Marto of Spain and Royal Ordnance of England. A total of 55 samples of each entry were field-tested by a mixed

ETS

Army's New M9 Based on Suspect Specs

Text & Photos by
Charles Karwan



ly need to cut wood when in the field, this emphasis on cutting aluminum made little sense to me. When I said the knife edge cut aluminum about as well as the saw, he said that didn't surprise him.

I tried to discuss what I felt were flaws in the nondevelopmental procurement program as it was being administered, like the lack of incentive to significantly beat specifications such as weight. When he accused me of just wanting to criticize the M9 bayonet "like everyone else," I remembered why I had left the Army.

It seems to me that the Army got a far better bayonet in the M9 MPBS than it deserved considering the shallow thinking that went into its specifications. Troop acceptance has been excellent, and its field performance indicates that it's superior to the M7 bayonet in virtually every performance criteria, though it is far heavier. Adopting the M9 increases every rifleman's basic load about .8 pounds, even the guy who is issued the regular wire cutter. Whether or not the extra weight is justified remains to be seen, as is troop reaction when it comes time to go to war with it.

reputation of being good "pig stickers" but poor field/utility knives. To make matters worse, a high percentage of M7 blades would break when subjected to the stress of a bayonet assault course. This was because of improperly heat-treated blades, not because of any inherent design fault.

If all that were not enough to cause the Army to look for a new bayonet, many felt that the M7 was inferior to the Soviet AKM knife bayonet. The Soviet bayonet could be used as a bottle opener, a saw for light metal and wood and, when combined with its scabbard, a wire cutter.

The Army did not want to spend the time or go to the expense of developing its own new bayonet. Instead, it drew up a series of specifications for a new bayonet and submitted these to the cutlery industry. The Army could then test the samples submitted and select the one that best fulfilled its specifications.

Without listing all of the Army's specifications, I'll mention the key points. The blade could not be longer than 8 inches and it had to extend at least 4 inches past the muzzle of the rifle when fixed. It had to have a clipped point with the false edge sharpened and with its back serrated. The entire system was not to exceed 1.8 pounds. Materials had to be corrosion resistant, with a non-reflective finish. In addition, there

group of infantry soldiers, including combat veterans, newbies, Rangers and parachutists, experienced and inexperienced. When the dust settled there was one clear and undisputed winner — Phrobis.

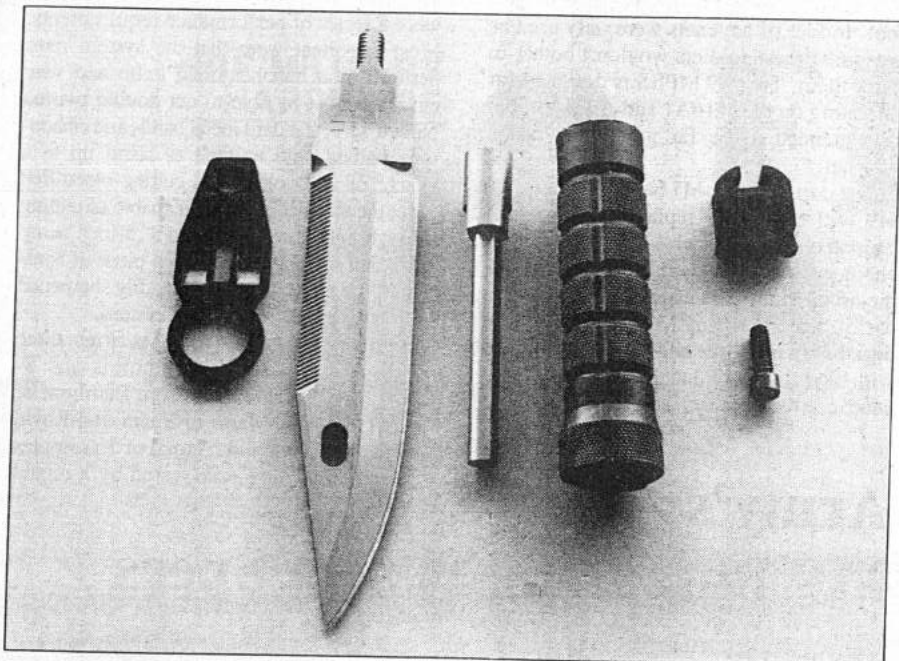
The M9 had no performance test failures at all. Further, when testers were asked to rate the bayonets in different categories, they unanimously rated Phrobis first as a bayonet, field knife, combat knife and wire cutter as well as in overall preference.

Phrobis' bayonet was the second most

FIELD TESTED

Author Chuck Karwan's opinions on the Army's new bayonet system come from years of experience as a combat soldier. After graduating from West Point, Chuck went on to attend Ranger School, Panama's JOTC, airborne and jumpmaster training and the Special Forces Officer's Course. He served in Vietnam with the 1st Cavalry Division, 5th Infantry Division (Mechanized) and the 10th and 5th Special Forces groups.

He's published over 100 articles and is a monthly columnist for *Gun World* and *Shooting Industry* magazines. We welcome his first feature article for SOF.



ABOVE: M9 bayonet disassembled to its major components. Modular construction allows easy replacement of damaged parts, including the blade, without major overhaul.

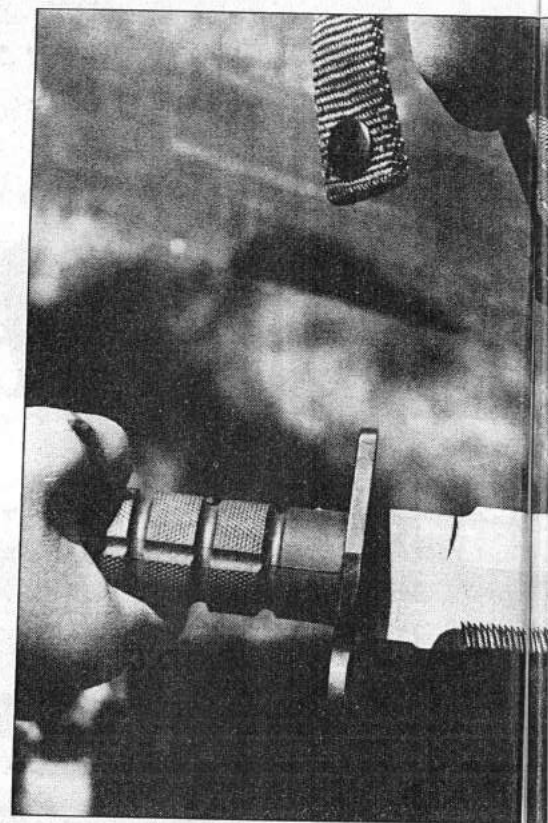
expensive entry in the trials, so the lowest bidder was not picked. However, prior to the tests the Army procurement people had done a cost analysis of what the proposed bayonet should cost, and their estimate was nearly identical to the Phrobis bid. Thus, the Pentagon was able to procure the best bayonet in the trials even though it was far from the cheapest.

The M9 is a handsome beast very reminiscent of a Bowie knife with its clipped pointed blade. The top edge is not sharpened like a knife, but instead is sharpened like a shear or scissor so the top edge can be used as a wire cutter. The right side of the thick, hollow ground blade has a deep fuller, to remove some weight. The result is a balance point right behind the guard which gives the bayonet lively handling characteristics when used as a knife.

Both the handle and scabbard are made from super-tough Dupont Zytel 8018 in an olive drab color. The crossguard and latch assembly are made from more conventional carbon steels such as 4140, with a rust-resistant dull black finish. The blade and its screw on the tang extension are made from 425 modified stainless steel. The blade is slightly over 7 inches long, 1.44 inches wide and .23 inches thick. It is blanked and drop forged to shape prior to grinding and polishing. The steel used for the blade is a relatively new one designed specifically for cutlery applications. Its major components besides the basic iron are .54 percent carbon, 13.5 percent chromium, 1.0 percent molybdenum and .35 percent of both silicon and manganese. It is designed to be a fine grained steel of superior edge-holding characteristics. Phrobis has also gone to the trouble of using a zone hardening procedure that makes the edge harder than the tang and other areas of the blade.

A prominent feature of the M9's blade is the oblong hole 2 inches back from the point. This hole, when combined with a

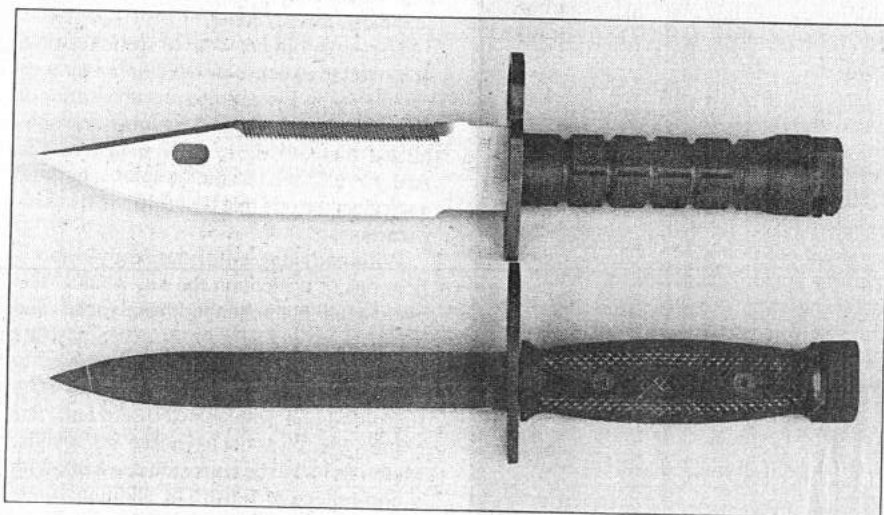
stud on the scabbard, converts the bayonet into a wire cutter. The back of the M9's blade has a type of sawtoothed edge slightly under 3 inches long. It is primarily intended to make the bayonet capable of cutting light aluminum sheeting as used on the skin of most military aircraft. The teeth are located below the back of the blade and are angled forward. This is important both to prevent the teeth from hindering the penetration of the bayonet when it is used as a weapon and to prevent the sawteeth from acting as barbs when it is being extracted. I personally know of a case where a custom combat knife with high sawteeth angled to the rear on its back was used to dispatch an NVA. My friend who did the dispatching could only get the knife out of the victim after considerable delay and difficulty. The sawteeth on the M9 should give no such problems. Behind the blade on the crossguard there are

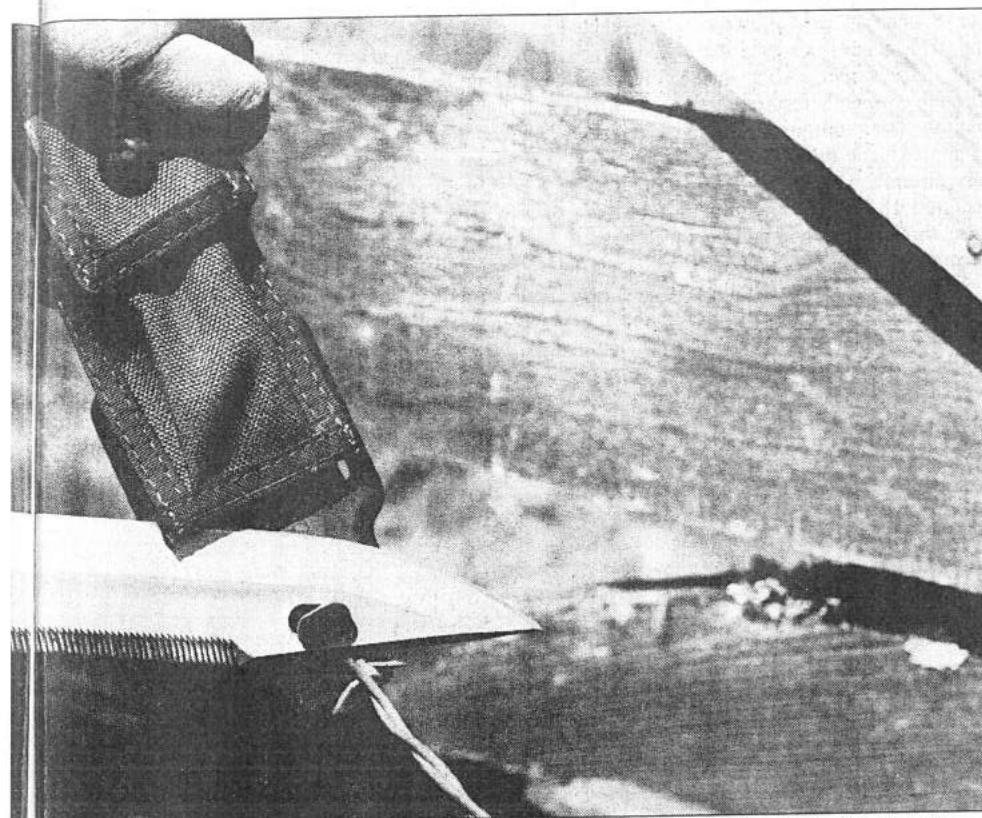


two circular cutouts that remove a bit of weight and can be used as a convenient bottle opener, an important feature to many soldiers.

The sheath of the M9 has a number of unique features. Besides the stud and wire cutter plate that converts the system to a wire cutter, the sheath also has a screwdriver at its tip, a sharpening stone on its back covered by a web strap with a snap closure, and a quick-release Fastex buckle that allows the sheath to be separated from the Bianchi belt fastener that attaches the whole assembly to the soldier's web gear. The bayonet is retained in its scabbard by two restraining straps as well as a spring retention device. The scabbard also has an optional detachable nylon pouch that can

M9 bayonet (top) and the M7 bayonet it's replacing in Army combat units.





One of Army's major specifications required the M9 to cut wire like its Soviet counterpart. However, it's awkward, inefficient and tactically unsound as a wire cutter, requiring two hands to operate. And incidentally, watch your fingers!

hold such things as a Swiss Army knife, Leatherman tool, a folding lock-back knife or other small items.

Though the individual soldier is instructed not to in the operator's manual, the screwdriver on the sheath can be used to disassemble the bayonet. The M9 can be readily disassembled due to its rather unique modular construction. There is a tang extension that screws onto the blade that extends back to the latch assembly. To disassemble the bayonet one needs only to remove the cap screw in the butt cap with the screwdriver on the sheath. The latch assembly and the handle can then be pulled off to the rear and the tang extension can be screwed off the blade, although this will normally require a wrench to loosen. Finally the crossguard can be lifted off. This clever construction allows damaged parts, including the blade, to be easily replaced within a few minutes. The juncture of the tang extension and the threaded portion of the blade's tang is so strong that the blade or tang itself will break before the two will separate.

Since the new M9 bayonet is supposed to have a primary role as a field knife, I was disappointed that Army specifications gave no consideration to a modified mounting system that would do away with the muzzle ring on the crossguard. Invariably the muzzle mounting rings on bayonets are in the way when they are being used as a knife. This is particularly true when you need to

put your thumb on the back of the blade to increase pressure when cutting or slicing. It would have been simple to use a modified washer under the flash suppressor of the M16. The washer would need only a small extension downward with a rectangular hole in it. The top of the bayonet's crossguard then would only need a matching rectangular stud and the muzzle ring could be dispensed with altogether, making the bayonet a much handier knife.

While researching this article, I was invited by the Phrobis company to visit their test facility and interview Mickey Finn, president and mastermind behind Phrobis III Ltd. and the M9 bayonet. After observing and duplicating a number of the Army's acceptance tests, I can say one thing for sure: This is one tough bayonet!

One of the tests has the front 1.5 inches of the blade clamped in a vise-like fixture. The

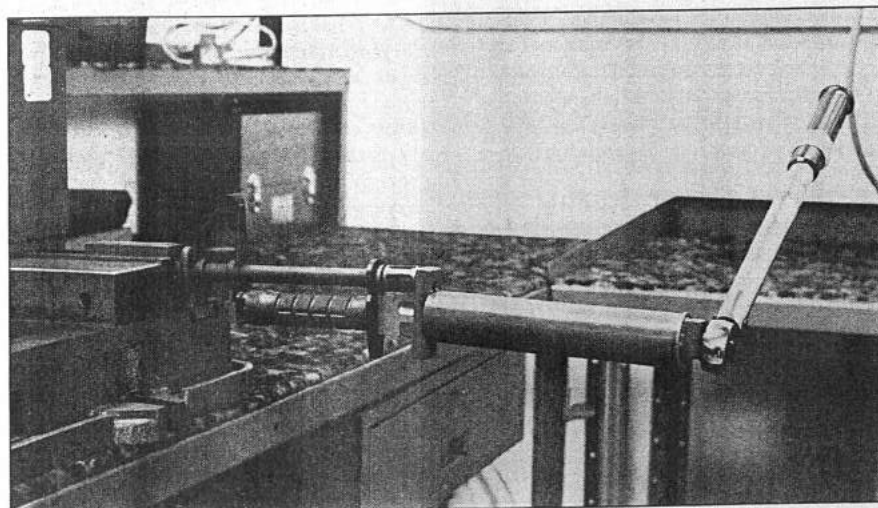
grip is then deflected in a 1.25-inch arc from the vertical to both sides. This is done in sub-zero, hot and normal temperatures. The Army allows up to 3/16-inch permanent deformation. The typical M9 bayonet not only handles this abuse easily with no deformation but can also handily withstand more than 100 percent more deflection. Remember we are talking about a stainless steel blade nearly .25-inch thick being bent in an arc over 2.5 inches at its butt without failure even at sub-zero temperatures. The blade of the M9 acts like a leaf spring under side pressure and has the added assistance of a very tough handle that has its own built-in give, to support the blade tang area. Sure, the M9 can be broken, but not easily.

Another test calls for the M9 to be frozen to a specified extreme sub-zero temperature then dropped from a 4-foot height onto a concrete surface on its point, on its butt and horizontally. The net result was a slight burr on the still-sharp bayonet point with no other discernible effect. Many knives or bayonets would just shatter under this test.

Other tests I witnessed included impact with a wood block-faced weight falling 18 inches onto the point of the bayonet mounted on a portion of the M16 barrel, 25 foot/pound torque applied to the bayonet blade while mounted on a portion of the M16 barrel, sharpness, latching mechanism, wire cutting, interchangeability of parts, serrated edge cutting aluminum sheet, and several others.

A number of interesting facts came to light during the tests. I noticed when I received my two test bayonets for evaluation that the edges of both bayonets had been ground with a very coarse stone or abrasive. Phrobis found that to consistently pass the Army's sharpness test, which dates back to a 1917 twine-cutting requirement that defies modern industry standards, the edge had to be relatively rough. Bayonets given a razor-like edge, as would be used on a hunting knife, would often fail the test. To quote Mickey Finn, "A razor won't pass the

One regular performance standard required a 25-foot/pound torque test while M9 is mounted.



Army's sharpness test, but a hacksaw will." So when you're issued an M9 bayonet don't blame Phrobis for the rough edge, blame the Army. In fairness to the Army, the coarse, almost sawtoothed wire edge that the bayonet comes with or has when it is sharpened with the stone on the back of the scabbard does cut most materials such as flesh, rope and soft wood rather well. Just don't try to shave with it.

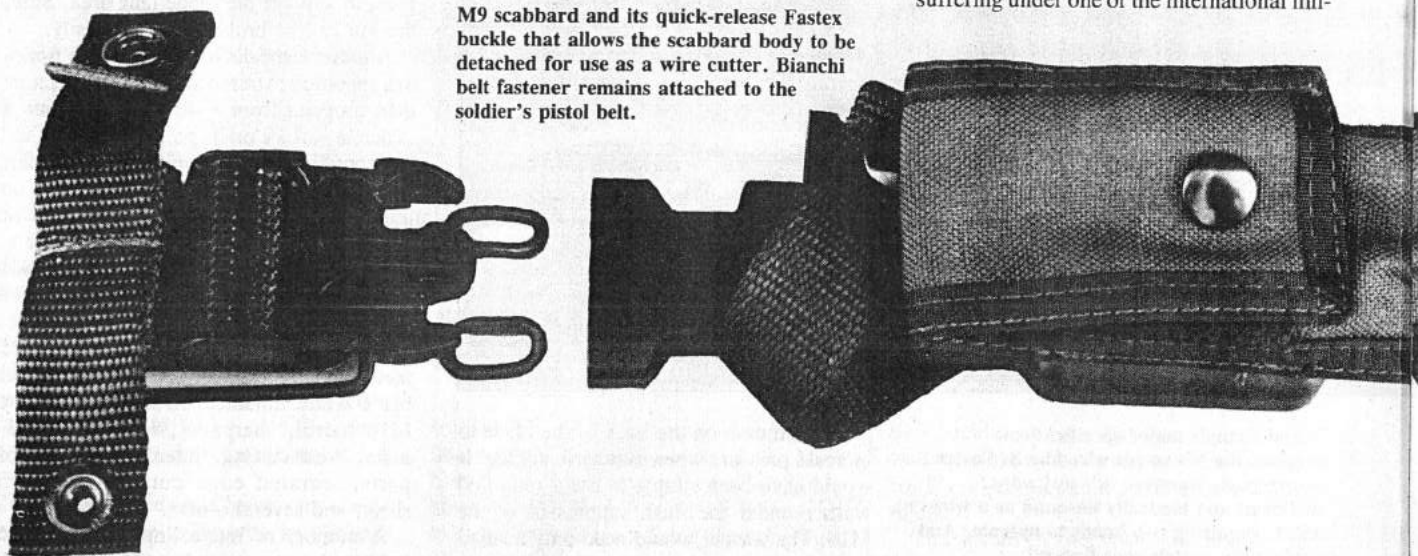
To say that the M9 exceeds the Army's requirements for the serrated or sawtoothed edge on the back of the bayonet is a gross understatement. The Army requires it must

cut 18 inches of 2024 aluminum alloy sheeting .025 inches thick mounted in a test fixture in *one hour*. After that it must cut through .5-inch hemp rope using a sawing motion. The aluminum sheeting is designed to approximate the skin of a downed military aircraft. The M9 will rip through the required 18 inches of aluminum and likewise through the hemp rope in about *10 seconds* with ease.

However, I noticed that the normal knife edge side of the blade cuts through the aluminum nearly as well and through the hemp rope even better, making the saw largely

superfluous, especially since I found the saw to be poor at cutting military nylon rope and perfectly miserable at cutting wood. Finn said that he realized that the saw was inefficient on wood but he had limited choices in its design. Phrobis had previously submitted several different very efficient sawtoothed patterns such as chisel tooth and double offset teeth patterns that cut wood extremely well, but the Army surgeon general disapproved them. Presumably this is because the surgeon general felt that the more aggressive-looking saw patterns might be considered *cruel* weapons that could be considered to cause unnecessary suffering under one of the international mil-

M9 scabbard and its quick-release Fastex buckle that allows the scabbard body to be detached for use as a wire cutter. Bianchi belt fastener remains attached to the soldier's pistol belt.



DO WE NEED A BAYONET?

Should a soldier carry a bayonet or not? Whenever a new rifle is adopted without the facility to mount a bayonet there is a clamor to add one. But once troops are given the bayonet to carry it's either too heavy or should be a better field knife, machete, saw or even wire cutter.

Originally there was no doubt about the need for a bayonet. In the days of single-shot weapons, a soldier needed his rifle or musket to be a lethal weapon even when it was empty. In those early days the bayonet was used to convert the shoulder arm to a type of pike to prevent being overrun by opposing cavalry. It later developed into a weapon of close assault.

The invention of repeating arms quickly threw the bayonet's worth as an offensive assault weapon into question. This was apparent in the American Civil War but was never as obvious as in the battle of Plevna on 30 July 1877 when a great Russian army massed against Turkish defenses armed with 30,000 newly acquired Winchester M1866 repeating rifles. When the Russian forces advanced with fixed bayonets for the

final overwhelming bayonet assault, they encountered a withering hail of .44-caliber bullets. Divisions of 10,000 men were cut in half in minutes. Slow to learn and insensitive to casualties, the Russians tried again, using the same tactics two months later with the same result. They lost 30,000 men in such useless bayonet assaults!

Still the bayonet persisted and it saw use in World War I, often tragically in assaults against machine-gun equipped troops. The concept of the bayonet as an offensive assault weapon should have died on the fields of Flanders or Gallipoli. Our own Corporal Alvin York single-handedly stopped a bayonet-charging German squad in WWI with seven shots from his M1911 .45 ACP pistol, resulting in seven downed Germans and firmly establishing the trained, pistol-equipped soldier's superiority to several bayonet fighters.

By WWII only Japan still made common use of bayonet assaults, finding out repeatedly that when it was tried against semiautomatic rifle-armed troops like U.S. forces, the usual result was that a lot of Japanese soldiers went to meet their ancestors. Still, on both sides the occasional successful bayonet assault persisted in perpetuating the myth of the "Code of the Bayonet."

Much is currently made by proponents about the British use of the bayonet in the Falkland Islands. It saw significant use, particularly in night fighting, on several occasions. Supposedly the British killed more enemy with the bayonet than with pistols and knives combined. No one seems to bother to mention the fact that the British issue practically no pistols or knives to conventional infantry. Likewise overlooked is that Gurkha troops who served in the Falklands beside their British cousins did not carry the bayonet, depending instead on their traditional kukris.

There are three combat uses for a bayonet: as an emergency weapon, as when a position is overrun; as a silent killing or close combat weapon, as on night patrols or raids; and as a tool, as when one clears a field of fire. In addition, the bayonet serves remarkably well in a non-combat role as a riot control weapon. Believe me, crowds are much less prone to push a troop formation with extended fixed bayonets! The first three uses can also be accomplished by a good combat knife, and a good handgun makes a far superior emergency weapon in almost every case. The role as a riot control weapon for rifle-armed troops can only be accomplished with a bayonet.

itary conduct agreements. These agreements are the ones that outlaw expanding bullets but allow napalm. Need I say more?

One more interesting thing came to light during the wire cutting tests. The military-issue M9 cut wire better than the commercial M9 example which I had previously tested. The commercial M9 is sold under the Buck name. Presumably to limit their product liability, Buck has changed the wire cutter plate on the bayonet scabbard to include a limit stud. This limit stud lessens the chance of an operator cutting himself by having his fingers between the bayonet and scabbard when cutting wire. Buck has also put a decal on the commercial M9 scabbard face that shows a hand with four cut-off fingers between the words "DANGER

AREA." Below this is a dashed line and the statement, "WARNING! When using wire cutter, keep fingers this side of dashed line." Unfortunately, the decal is completely covered by the pouch on the front of the scabbard. The net result of this change by Buck is that the limit stud does not allow the bayonet to shear off the wire as it would usually do. Instead it forces the bayonet to pinch through the wire against the stud itself. In addition, the wire-cutting edge on the back of the bayonet impacts directly on the hardened stud, quickly dulling and damaging the cutting edge. While the commercial M9 obviously has some safety advantages over the military-issue version, it does cut down the efficiency of the system as a wire cutter.

So that I could give SOF readers a thorough personal evaluation of the M9 MPBS, I subjected my test pair to many different tasks over a period of several months. First, I gave one M9 to my wife to use in the kitchen for slicing and chopping meat and vegetables and cutting through bone. It was exposed to water, salt, blood, acidic vegetable juices and more. I found the M9 to be extremely rust resistant. Even the non-stainless metallic parts showed no sign of rust because of their highly rust-resistant finish. The blade proved to be too thick to be efficient at slicing, but it still worked reasonably well. I also performed a test with a couple of racks of pork ribs substituting for human ribs. I was a little skeptical about whether the M9's single-edged thick blade would be effective against the bony parts of an enemy's anatomy. I found that the M9 would penetrate the ribs quite easily. It would either slide off the bone and penetrate between the ribs or, with moderate effort, penetrate the ribs themselves. Because of its thicker and broader blade, the M9 made much more severe wounds than those of an M7.

To test its utility as a field knife I used it for a wide variety of tasks, such as cutting brush as would be done to clear a field of fire, cutting poles for a litter or lean-to, sharpening stakes, etc. The results were mixed. First, the saw was virtually worthless cutting wood. If you were going to cut just one hardwood pole with the saw, you had better pack a lunch. Using the edge side for chopping for the same task is better but not very good either.

I enlisted the aid of a very experienced and field-wise sergeant major in Special Forces. I had him try to chop through a 2.5- to 3-inch thick hardwood pole with the M9. It took 3.5 minutes to get halfway through and by then he had a blister on his hand. In about the same time I was able to cut completely through the pole with my Swiss Army pocketknife saw blade. It took me about four minutes to do the same thing using a much lighter and thinner Norwegian Army field knife with no blisters or discomfort. It's a shame that the M9 saw is not better at cutting wood because it would be useful. In Vietnam on recon patrols I would not let my troops do *any* chopping because the noise would carry too far. When we set

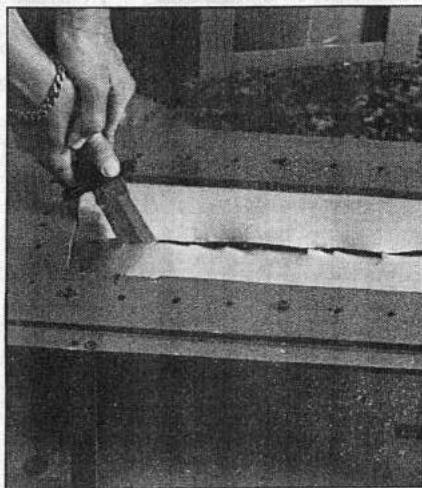
up sleeping and fighting positions, all brush clearing was done by whittling or slicing with field knives or by sawing with small hand saws.

I did find the M9 to have enough weight to chop through light brush and sharpen stakes, poles and pegs. My friend's blister points out one thing I do not like about the M9 — its handle. While I like the ruggedness of the material from which it's constructed, I do not like its shape or sharp edges. The handle is round in cross-section, according to Phrobis to allow for a great versatility of grips. In fact, a round handle offers a satisfactory grip in every position, but an excellent grip in none. Also it offers poor resistance to torque: I found that it would often twist painfully in my hand when chopping. For a tool like a knife, a handle oval in cross-section with a central swelling offers a satisfactory grip in every position and an excellent one in one or two primary-use positions. In my opinion even the shape of the M7 handle is far superior to that of the M9. The M9 handle is also checkered and has circular and longitudinal grooves. While it offers a secure grip it also offers a lot of abrasive edges that can irritate the hand.

State-of-the-art in knife handles are the rubbery substances like Kraton and Hypalon. These offer significant advantages in shock absorption, security and comfort. The M9 would be better if the handle could be made or coated with such a material. One last point on the handle: You are bound to hear someone criticize it because its round shape does not allow the soldier to know the orientation of the blade by feel in the dark. That's nonsense, because the feel of the crossguard readily transmits blade orientation.

During wire-cutting tests, I found that, although the M9 MPBS *would* cut wire, it has a number of drawbacks in that mode. First, it takes two hands, one on the scabbard and one on the bayonet, to cut wire. When one is cutting loose comms, demo or barbed wire, the wire is usually held in one hand and cut with the wire cutter held in the

M9 will rip through 18 inches of aluminum sheet in about 10 seconds — not a task combat troops face very often.



There is also the combat handgun to consider. The new M9 bayonet weighs the same as a Glock 17 9mm loaded with 18 rounds. Which would you rather have in combat — an airweight S&W Chief Special plus a 13-ounce bayonet or just a 1.8 pound bayonet? I know my choice.

It is possible to make a good lightweight combination field knife and bayonet, as evidenced by the current-issue Finnish bayonet, which weighs in at only 10 ounces with scabbard. It has a 6.5-inch blade with nylon handle and is nearly indestructible. However, it isn't designed to cut wire or aluminum sheeting, saw wood, open bottles, be a screwdriver or any of the other extra requirements of the U.S. Army. It's just a hell of a fine knife and weapon.

My personal feeling is that it would have made more sense for the Army to adopt a lighter bayonet and scabbard and then issue a lightweight tool similar to the Leatherman as a wire cutter, which could even contain efficient wood saw and metal-cutting hacksaw blades. The tool could even be carried in a pouch on the bayonet scabbard and could also be issued to people such as machine gunners who are not issued a bayonet or wire cutters. Maybe the Marines will give such a system a try.

other. Using the M9 there is no free hand to hold the wire, so the system is awkward and inefficient at best. It also takes far more effort than cutting wire with one-handed plier-type cutters. In a tactical situation you'd probably have to put down your rifle to use it. Also it is extremely difficult and potentially dangerous to use in poor light if you leave a finger or two between the scabbard and bayonet.

It's interesting to note here that the Soviet version is terribly difficult to use and it's inefficient as well. If the M9 wire-cutting capability is viewed as an emergency feature for use when there is no other wire cutter available, it makes some sense. However, if the thinking is that wire cutters will now no longer be needed, I believe the thinking's faulty. I certainly recommend that the present issue of wire cutters to radio operators, signalmen, engineers and the like be maintained. Unfortunately, Army spokesmen are quick to point out that the M9 MPBS replaces two or three tools with one. Don't you believe it.

This also brings up another matter: M9 MPBS' weight. It weighs more than the M7 and a good pair of lightweight wire cutters like the Leatherman tool. In fact, you could also toss in a Swiss Army Ranger utility knife and you would just equal the weight of the M9 MPBS. Frankly, I feel that it is far heavier than it needs to be. All the lighter entries into the trials had performance failures, but none of them were designed by

Phrobis. I would bet next month's paycheck that Phrobis could have come up with a lighter bayonet system that could accomplish all the requirements if there had been an incentive to do so. However, Army specifications only required that they stay under 1.8 pounds. Finn admits that he used every last bit of that weight to overengineer the M9's performance capabilities by a full 100 percent or more. He told me he came so close to the limit that, if the blade fuller or bottle opening relief cuts were not included, the M9 would be overweight.

"Phrobis could have come up with a lighter bayonet ... if there had been an incentive to do so."

My test of the M9 revealed a number of other things. First, having a sharpening stone integral to the system is a great idea. The stone on the system worked satisfactorily in spite of its small size. I found that the Fastex buckle which allows the scabbard to be quickly detached from the belt rattled too much for night or recon patrol use. This

buckle was an Army requirement, so Phrobis isn't to blame. I expect patrol leaders will have the Fastex buckle thoroughly taped so it won't rattle, which will also prevent detaching the scabbard for wire cutting duty. The entire assembly is held to the superb Bianchi belt fastener by only two hollow rivets. While I must admit that they seem adequate in strength when new, I strongly suspect that they will give trouble once the heads of the rivets receive some wear. To Phrobis' credit, they intend to go to solid stainless steel rivets if they can get Army approval.

I was curious to know how the strike of the bullet is affected by firing with the bayonet fixed. I was surprised to find that, on the particular AR-15 I tried, which was one of the older, light-barreled models, the strike of the bullet was a couple of inches higher at 50 yards with the bayonet fixed than without the bayonet. Regardless, it did not change the point of impact enough to cause a miss at assault ranges.

Because of its sturdy construction, the M9 will also be very useful around the typical ammunition supply point. It can be slipped under bands and easily break them with a lever motion. It can pry open crates and in general serve as a sharpened pry bar.

The contract awarded to Phrobis calls for delivery of 315,600 M9 MPBSs over a three-year period at a cost of \$49.56 per copy. Actual manufacture is being conducted by Buck Knives Inc., one of this

 UNDERWATER/SURVIVAL 			
Gerber BMF Knife The ultimate edge - 8" Bowie blade with chisel tooth saw. Overall length 13". 1/4" thick blade. Weight: 15 oz without sheath, 28.5 oz with. Constructed from carbon surgical stainless steel, honed to a razor's edge. Rockwell c54-55 hardness! New, improved sheath features clips, compass, sharpening hone, and heavy Cordura construction. Lifetime warranty. Retail \$160.00 Sale \$109.95 	Chronosport The name in divers watches! All black, multi function analog/digital combination, alarm, rotating bezel, sweep second hand, timer, two time zones, more! With nylon strap - Retail \$462.00 Sale \$346.50 With bracelet - Retail \$545.00 Sale \$408.75 	Compact SCUBA Ready to use - just add air. Two cubic foot cylinder with attached regulator. Enough air to ascend from 90 feet, or for short period of submersion. 17 1/2" long, 2 1/2" wide, and weighs only a few pounds. Retail \$190.00 Sale \$149.95 	Survival System Tekna's Wilderness Edge weighs only 14 oz with sheath, measures 10 1/2" long, and has a surgical stainless steel 6 blade. The knife handle houses a Splash Light under a hinged panel, while the sheath contains a full survival system - signal mirror, survival guide, fishing reel, hooks, compass, and fire starter! Model T-6300. Retail \$129.95 Sale \$109.95 
Camouflage rubber coated 7X35 with rapid focus, carry case, strap. Measures approx. 7 X 5 X 2". Model 139. \$85.00 	Camouflage rubber coated 7X50 with rapid focus, carry case, strap. Measures approx. 7 X 8 X 2 1/2". Model 140. \$99.95 	Black rubber coated Nikon Tropical 7X50, individual focus for each eye, includes special lens covers, strap. Measures approx. 8 1/2 X 8 1/2 X 3". Model 750HP1F. Retail \$630.00 Sale \$399.95 	Compact Nikon 9X25, with center focus, carry case, strap. Porro prism, measures approx 4 1/2 X 4 X 4 1/4". Model 925CF. Retail \$190.00 Sale \$119.95 
U.S. TECH SCUBA All American made equipment! Shadow all black BCD with power, pack, large pockets, and more, ARIS series Explorer regulator with ARIS octopus, Datacom double console (PSI/Depth), and Aluminum 80 K cylinder with boot. Retail over \$1000.00 Sale \$579.95 	Dive Flasher Ideal for diver location, rescue work, or marking. O-Ring sealed. Uses one C cell battery. Water-proof to 150'. Measures approx. 5" X 1 1/4". \$29.95 	Mini Flash Light Features pocket clip, magnet in butt, transparent housing. Screw down lens to turn on. Very bright. Uses two AAA batteries (Included). Overall length 4 3/4", 3/4" wide. By Pelican. \$8.95 	Mask, Snorkel, Fin Package Graphite black fins with vented blade and open heel, silicone mask with tempered glass, and large bore silicone snorkel. Rugged, high quality, great for snorkeling or SCUBA. Retail \$140.00 Sale \$84.95 

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country's best cutlery manufacturers. As of July 1987 more than 45,000 M9s had been delivered. SOF readers should note that Buck will also be producing the M9 bayonet for commercial sale.

The M9 MPBS is an impressive piece of equipment. It is tough beyond belief and a decidedly lethal weapon as both a knife and a bayonet. It is handsome in its own right and should serve the soldier as a useful basic tool. Both Phobis and Buck can be proud that they have done their best to give the American soldier the best bayonet in the world.

M9 Update

Since I finished this article on the M9 MPBS I have several times encountered rumors to the effect that the Army had rejected the first 45,000 M9 bayonets. The first time I heard the rumor I was almost sure it was false but when I heard it from widely separate sources it seemed that I should do some investigating. The fact is that the rumor is false. The M9 MPBS is produced in lots of 1,080 pieces. Eighty pieces are actually tested under Army quality control supervision right at the Phobis facility. On successful completion of the tests, the Army representative signs for the entire lot. To date every lot has been accepted. Deliveries actually began in February 1987 with 1,000, in March 5,000, in April 9,000, and 10,000 every month afterward. From the standpoint of quality manufacture and meet-

ing the Army's desired performance, the M9 MPBS is without peer in the world of bayonets. ☒

SHOT OUT OF LAOS

Continued from page 67

headed north.

When I issued our first verbal report, the radio operator was incredulous: "You saw what? Where? The pilot was speaking what language?"

To complicate matters, in the morning when Spider flew over asking for further details on our sighting, we learned that our map was missing a couple of mountains in this particular range, which made it more difficult to report where we were and where Ivan's DZ was.

By 0700 we were socked in again. We hadn't heard the dogs in over 24 hours, so I sent Sau and Son out to find the tank trail while Shore and Tuan went out to find some water. During the night, my tooth had fallen apart, and I was in much pain. Because King was carrying a slide-action 40mm grenade launcher, I kept him on the hill with me.

Shore and Tuan observed some woodcutters hacking away on the large trees, cutting out one of their slash-and-burn fields that were so plentiful in the mountainous areas

of Laos. They returned to the hill by noon.

Son and Sau searched for several hours before spotting some trackers. Shortly after seeing them, Sau and Son heard the dogs and returned to the hilltop.

Sau felt it was only a matter of time before the trackers pinpointed us and so he urged moving. Ten minutes later we were heading down the backside of the mountain. After descending about 1,000 feet, we moved west, back toward the direction we had come from. During our travels we crossed several trails that weren't on the map but were heavily used.

At last light, we found a series of huge boulders that were reminiscent of Stonehenge in Britain. There were limited entrances into this rocky area and no one could launch a mass assault against us if they pinpointed us.

About midnight, ST Idaho was collectively shocked out of its sleep when we heard barks from what sounded like the largest dogs in the world.

Before moving out of the RON at first light, Sau reinforced the eastern entrance to the stone area with mines and pepper.

Spider was overhead early and I told him we wanted to be extracted ASAP. After getting a fix on our location — Sau climbed a tree and flashed a mirror at him — Spider pointed us toward an open area big enough for an extraction.

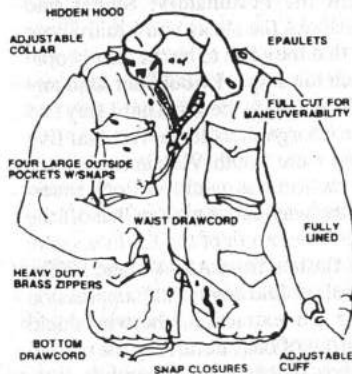
He returned in 30 minutes with bad news:

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