

THE COMBAT AUTO



By **BILL WILSON**

Edited By **CAMERON HOPKINS**
Forwarded By **JERRY BARNHART**

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Introduction

The sport of practical shooting, I think it's safe to say, would not be the same without Bill Wilson. Both as an active competitor himself (and a darn good one in his day) and as a businessman, Bill has contributed more to the growth and development of practical shooting than many people realize.

When I began competing in 1983, Bill was one of the top ranked shooters on what would later become known as the "professional circuit" of matches. Bill consistently placed in the top ten of the major shoots like the Steel Challenge, Bianchi Cup, Second Chance, and the US Nationals. In that day, there were no factory-sponsored teams like there are today, but Bill was already a step ahead of the pack with his active support of the matches with his sponsorships.

Bill was developing his trademark Wilson Accu-Comp pistol through the experience he gained on the firing line. Beginning with the Accu-Comp "C" in .45 ACP, the guns wearing the emblem "Wilson Combat" began an evolutionary process that still continues today with Bill's newly introduced "Super Grade" model and experimental "wide body" frame.

Along the way came the single most imitated pistol ever seen in practical shooting, the Accu-Comp "LE." Named for the Arizona duo of Rob Leatham and Brian Enos, the LE model was (and still is for that matter) considered the state-of-the-art compensated combat auto of the single-port expansion chamber style. Bill would go on to popularize the dual-port compensator, but his large scalloped port of the LE set the pace in compensator technology from 1983 until the introduction of the dual-port in 1989.

Not only as Bill Wilson contributed valuable gun designs, he was also the gunsmith who catapulted the .38 Super cartridge to prominence in 1984. The scene was the US Nationals in Phoenix and at the time only a small handful of daring wildmen

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*Jerry C. Barnhart with his Wilson
“Super Grade” match pistol.*



shot the radical little cartridge. Bill and his longtime friend and business associate Bill Rogers were both shooting a Wilson Combat .38 Super and so were the Arizona hosemasters, Leatham and Enos. The match was won with a Wilson Accu-COMP in .38 Super.

The switch to .38 Super from the traditional .45 was rapid. I was the last to win a US Nationals with a .45 ACP in 1987. I seriously doubt a US Nationals will ever be won with a .45 again, unless there is a drastic rule change.

Most recently, Bill once again extended his winning track record of innovation when his new Wilson scope mount on a Colt Government Model became the first optically sighted combat pistol to win a US Nationals. I was shooting that 1990 breakthrough gun, but it was Bill Wilson who took my idea of a scope-sighted .38 Super and turned it into reality.

In 1991, I won the Steel Challenge with a Colt Lightweight Commander with Bill's improved "steel version" of his scope mount. This was another "first" for the winningest pistolsmith in history—the first Steel Challenge to be won with an electronically sighted pistol!

Other than contributing significantly to the development of combat pistol technology, Bill Wilson also was a leader in the

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professionalizing of the sport. The first factory-sponsored team were the so-called "Killer Bees" of Team Safariland, so named for the yellow and black team uniforms. Bill was a charter member of the team. He and Bill Rogers convinced Safariland to invest in the team.

Actually, Bill was sponsoring shooters and donating to the matches long before the formation of Team Safariland, but he never had an "official" team of Wilson Combat shooters. Nevertheless, if it wasn't for Bill's quite lobbying behind the scenes, Team Safariland might have never got off the ground.

From there the growth of factory-sponsored teams has spiralled. Today there is the full-time shooting team of Smith & Wesson, Springfield Armory and the team I am proud to be a part, Colt's Manufacturing Company.

Throughout the decade of the Eighties, Bill Wilson has been a leader. He has distinguished himself as a competitor, firearms designer, gunsmith, sport promoter, businessman. And now he has shared his unique experience and knowledge in a fascinating new book, *The Combat Auto*.

There is something in this book for everyone, hobby shooter, competitor, armed citizen. Whether you're concerned about what modifications are best for self-defense or what the next "racegun" will look like, *The Combat Auto* addresses the most commonly asked questions.

And it's written by the guy who had more to do with the development of the combat pistol than anyone else in the past 15 years, Bill Wilson.

Jerry C. Barnhart
July 1, 1991

Jerry Barnhart is a Combat Master and champion shooter who is currently the anchor of Team Colt. A full-time professional shooter, Jerry teaches advanced marksmanship classes to civilian and military students nationwide. Jerry is a two-time US National champion winning the prestigious event in 1987 and 1990. He has won an unprecedented four Florida Invitational Pistol Tournaments and collected a pair of Steel Challenge championships (1987 and 1991). Jerry won the Second Chance bowling pin shoot in 1985 and 1987 and has placed second in the IPSC world championship twice.

The Beginning

Handguns have always fascinated me. At first, the interest was mainly in shooting them. My first gun, in fact, was made for shootin', a .22 caliber High Standard revolver. In the hills around Berryville, Arkansas, in the foothills of the Ozarks, I'd plink at cans and stumps, or hunt squirrels and rabbits, mostly unsuccessfully. Sometimes I didn't think I could hit the ground, but I did have a good time shooting!

The .22 gave way to a Ruger Blackhawk and a Smith & Wesson Model 19, both in .357 Magnum. And magnum it was. The gun magazines were all in agreement—load 'em up and shoot 'em hot. So I loaded 'em up and shot 'em hot, and that stifled my progress in learning how to shoot for years.

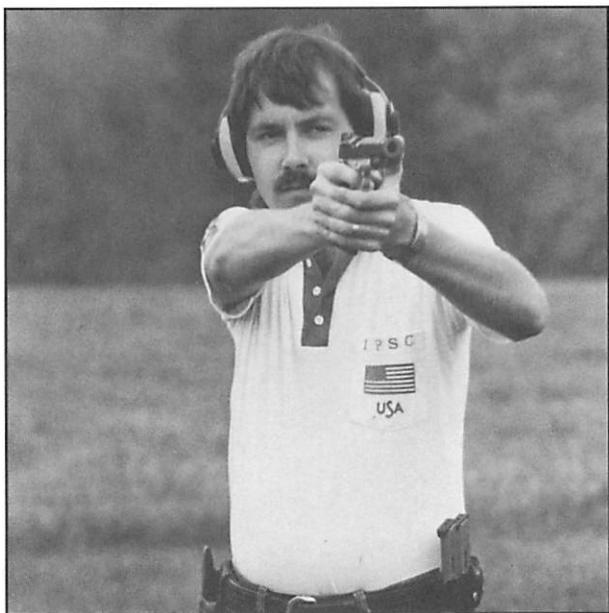
Still, it was fun.

When I went to school at Oklahoma State Tech to learn the family trade, watchmaking and jewelry making, I took the guns along. Being a typically poor student, I barely scraped by, casting my own bullets over a Coleman stove and loading the cartridges with a little Lee Loader. I had to keep the .357 brass sorted, since the Smith's chambers were larger than the Ruger's, and I had no way to full-length resize the brass!

In addition to shooting, I confess to being a chronic gun tinkerer. Military surplus Mausers and Lee-Enfields were available by mailorder dirt cheap, and "sporterizing" them was all the rage.

I "sporterized" my share, too, although looking back I

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Once I tried IPSC shooting, I was hooked! Practical shooting is a shooting sport that is both challenging and rewarding. Here I am in my United States Team shirt when I represented the US in international competition at the IPSC World Shoot in South Africa.

suspect it was more a case of “butchering” than “sporterizing.”

When I got back from college and joined the family watchmaking business, I decided to open a small retail gun and sporting goods store on the side. I also made an important discovery—a person could learn to shoot a centerfire revolver pretty well if that person didn’t insist on magnum loads every time.

Watchmaker Turns Pistolsmith

I was so encouraged by shooting .38 Specials in my guns—something that had never occurred to me before—that I saved enough money to buy a Colt Python with a six-inch barrel.

I began shooting full-wadcutter loads in that Python, and my shooting began to improve dramatically. I could hit beer cans on demand at 25 yards, and when I went up to heavier loads, my accuracy didn’t suffer.

My tinkering with guns had also improved dramatically.

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If you had told me 20 years ago that one day I would be able to build this gun, I would have laughed! Today this full-house Wilson Accu-Comp Super Grade is the best we make!

Being trained as a watchmaker was a major asset: All of a sudden gun parts looked huge. I also understood the necessity for precision, and the way changing any single part in a complicated machine changes the operation of all the parts.

Getting more serious about shooting required that I start competition. The closest competition available was PPC revolver shooting, and I began using my Python and wadcutter loads. As I continued in PPC I went to Smith & Wesson-based heavy barrel revolvers, and I soon rose to Master Class. The only problem with PPC was that it was boring, and I was chafing to try my shooting hand at something else.

IPSC Is Born

In late 1976 I heard about a different form of shooting going on in Columbia, Mo., at a club called the Midwest Practical Pistol League. The International Practical Shooting Confederation (IPSC) hadn't yet been formed, but I thought it

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Ron Phillips is our shop foreman and does an outstanding job of maintaining the consistent level of quality that Wilson Combat guns have established as a standard of excellence.

sounded a lot more interesting than PPC. I took the only automatic I had, a Browning Hi-Power, and went to Columbia and shot a match. From then on I was hooked on practical shooting!

The second match didn't require a reload, so I took my Python. By the third match, I had my first Colt .45 automatic and my first shock. An out-of-the-box Government Model just wouldn't cut it in competition. Sometimes it wouldn't work at all.

So I bundled it up and sent it to a "Big Name" gunsmith for some basic work. I was even more unhappy when the gun came back, so unhappy, in fact, that I sold that gun and bought a stock Gold Cup.

That gun was totally reliable out of the box, and all I did was get a new front sight and speed safety, bevel the magazine well and put a

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There is still a remarkably strong demand for good, reliable five-inch guns, in .45 caliber of course, just like there was when I started shooting. Some things never change!

heavy duty recoil spring in it. I shot that particular Gold Cup all the way through the 1977 Nationals in Denver, where I finished 14th.

I got the old common feeling—I was sure I needed a new gun. I didn't, but that was beside the point. I sent another Government Model off to a custom pistolsmith, and when I got it back, I didn't like that one either.

I thought that if I could repair watches, if I could make tiny parts for something as intricate as a piece of jewelry or a watch, I could certainly build a gun I liked.

So I sold my second "custom" Government Model, ordered a bunch of parts from King's Gun Works and Armand Swenson and built what we now offer as the #120 Competition Grade Gun.

That gun was exactly what I wanted, and it shot well. A couple of my shooting buddies saw the gun, liked it and asked if I could make them one. I found myself spending more and more

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Combat shooting matches combine athletic ability with shooting skill, which is another way of saying it's downright fun!

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time building guns and less and less time managing my sporting goods store or working on watches.

Taking The Plunge

My wife Darla and I had a major decision to make: Should I step from hobby gunsmithing to full-time gunsmithing, giving up the sporting goods store and watchmaking?

With her backing, I made the big leap, and it was scary. We had no operating capital and just the gut feeling that the market for quality .45 modifications was getting ready to take off. The big shops like Pachmayr were one or two years behind in delivery, and I knew that a lot of new shooters were crying for a pistolsmith who understood practical shooting.

While the first year-and-a-half was rough, I got help from some of the top people in the business.

Jim Clark and Armand Swenson were particularly helpful. Ken Hackathorn was instrumental in instructing me on the fundamentals of practical shooting and how those fundamentals applied to gun modifications.

By the end of that year-and-a-half, I had more work than I could do.

Ironically, success brought its own problems. I needed to expand the shop, but I also knew that expansion has been the kiss of death to some good gunsmithing shops.

I was lucky to find a few skilled people who cared about quality workmanship like I did, but who might not be familiar with the .45 auto. I have been able to train my staff of gunsmiths in my own style of gun work and they have worked out so well that I have added more as I need them to keep up with demand.

I really don't think a shooter can tell which of us has done a particular gun coming out of the shop. We maintain a level of quality regardless of who works on the gun.

Growth And Prosperity

Wilson's has grown into one of the most comprehensive shops in the country for a person into practical shooting. We developed the Accu-Comp system, a distinctive style of compensator with a large single-port expansion chamber.

Using a Wilson Accu-Comp in .45 ACP, Rob Leatham won the 1983 IPSC National and World Championships. Then in 1984, the "Year Of The .38 Super" as *American Handgunner* put it,

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Robby switched his Accu-Comp from .45 to .38 Super, a really radical idea at the time, and promptly won the 1984 IPSC National Championships. And the 1985 IPSC Nationals, the 1986 IPSC Nationals and again the 1986 IPSC World Championships. For the first time in history, a man had won two World Championships and four National championships—all with Wilson Accu-Comps.

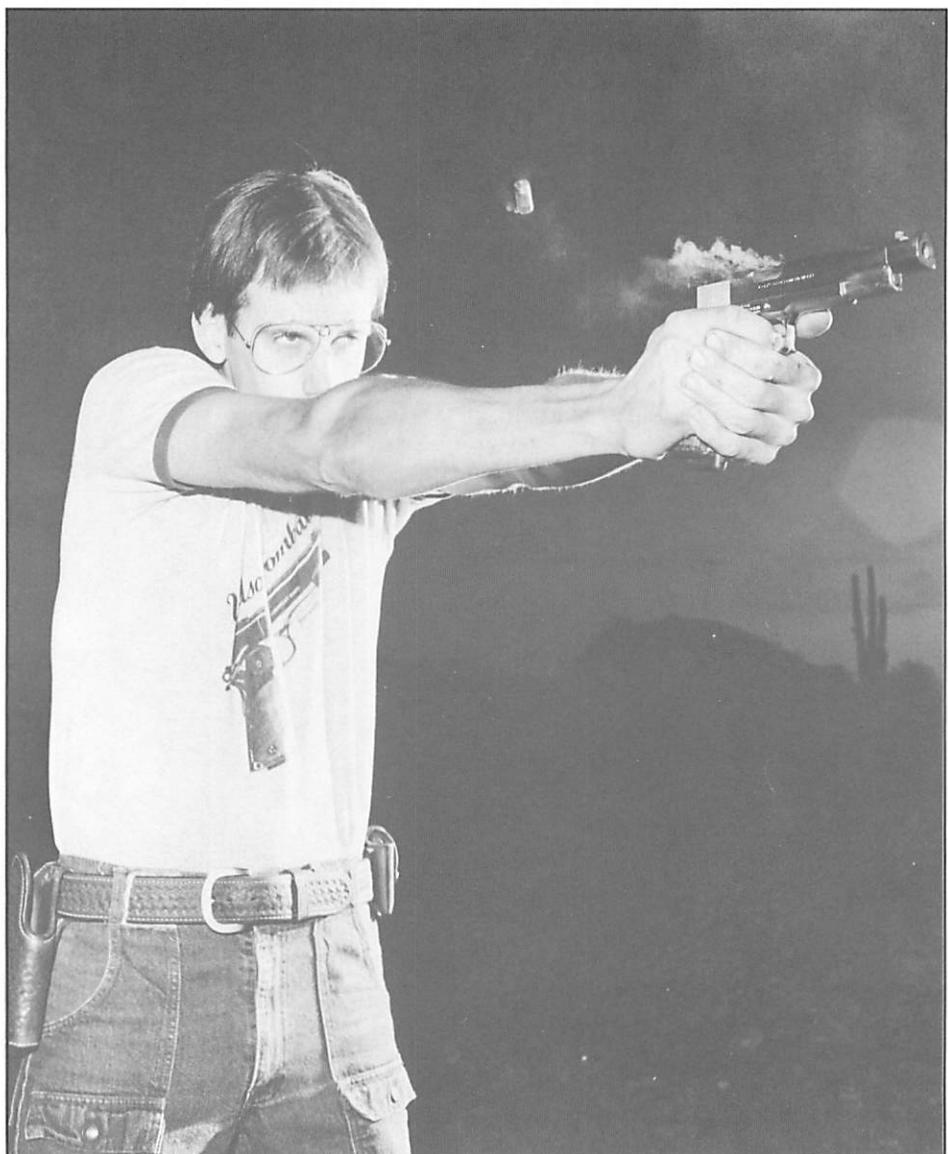
Then in 1988 we announced the most dramatic improvement to compensator technology in years—the double-port expansion chamber design that we now offer as our Wilson Super Grade match pistol and also in our double-chamber Accu-Comp kit.



Jerry Barnhart won the 1991 Steel Challenge with a prototype Colt alloy-framed Commander specially modified by Wilson's with a Tasco sight. We offer a virtually identical gun—only the steel frame differs—as our "Steel Special."

With this newly advanced design, Rob Leatham won his fifth National title with his Wilson Super Grade .38 Super. He proved his consistency as a winner yet again in 1989 by winning the championship yet again with the self-same Super Grade.

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Brian Enos is one of the most consistent shooters on the pro circuit. Here he is in a rather ghoulish stance shooting one of our Wilson Accu-Comp "LE" (Leatham-Enos) models in .45 ACP. Because of the caliber, this would make it about 1983. Brian has since quit his job as a car mechanic and gone to work shooting full-time for S&W.

Nyle Leatham photo

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When Rob finally lost his crown to his arch rival Jerry Barnhart, the winner's circle once again saw... you guessed it, a Wilson Super Grade .38 Super! Jerry chose one of our Wilson Combat pistols and had us outfit his pistol with a radical new Tasco "red dot" sight.

The year was 1990 and nothing had ever swept competition shooting like Jerry Barnhart's Tasco scope.

The Accessory Business

In addition to our custom gunsmithing, which is our bread and butter, we now offer a wide array of our own accessories for John Browning's amazing 1911 pistol, including three types of fixed sights, two styles of precise match triggers, the most precisely machined "Commander style" hammer on the market, extended ejectors, Shok-Buff kits, the new Series 47 selection of Wilson/Rogers stainless steel magazines, full-length guide rod systems, magazine base pads, Wilson's beavertail safeties, the Wilson-Dwyer "Group-Gripper" kit and, well, you better just order our full-color new catalog because it's a book unto itself on all the best accessories for your 1911 pistol from Wilson's Gun Shop.

We pride ourselves on being a "full-service" operation, keeping the largest inventory of 1911 accessories available anywhere. We also stock leathergoods, timers, chronographs, cleaning supplies, books— everything for the practical shooter. And we're all shooters ourselves, so we have a pretty good idea of what shooters need.

This book, in fact, is in response to the needs of practical shooters. It's completely updated and revised from our best-selling earlier work, *The Combat .45*.

We at Wilson's hope that you, the practical shooter, will get a little better idea of some of the modifications and accessories that are available to you.

The Combat Pistol

A combat pistol is nothing more than a handgun that's thoroughly reliable, reasonably accurate, sufficiently powerful and moderately controllable. Very simple really.

But within that definition we have a lot of room to move, from the basic combat pistol up through the full-house combat competition pistol. The only common ground in the many options and varieties of combat pistols is the basic gun itself, John Browning's amazing self-loading automatic pistol that he invented just prior to World War I.

But as good as Colt's Model of 1911 is, it's still a machine that's made by man and, the last time I checked, man is not perfect. Neither are his machines.

If we could invent the perfect combat pistol, it might have Colt's ergonomic shape, Glock's space-age construction, SIG's renowned reliability... and shoot caseless ammo! Then we'd never have to hen-peck after brass!

Unfortunately, the basic combat pistol is a series of compromises—lighter weight traded-off for greater recoil, for instance—and today's shooter still has to decide what's most important for him.

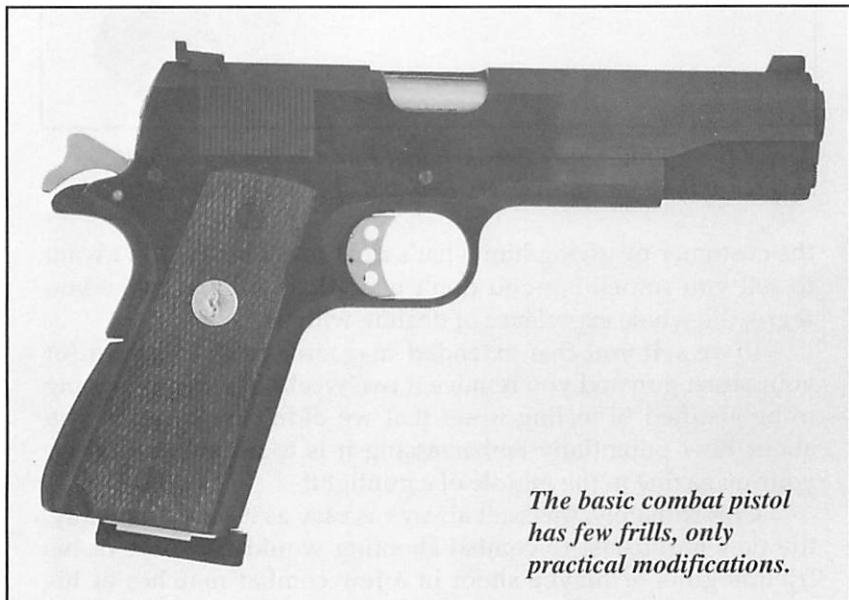
I can't tell you what you need and neither can other top combat pistolsmiths like Ed Brown or George Heuning. Just remember that these compromises may affect whether a shooter wins or loses a match or, more seriously, survives a self-defense situation.

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In my first book, *The Combat .45 Automatic*, I said that I have always been a strong advocate of the "less is more" philosophy as it applies to combat pistols. I still do. Stick to a minimum amount of tried and true modifications and you won't go wrong. KISS—Keep It Simple Stupid! That might sound crazy coming from the guy who makes more combat pistol accessories than anyone else, but Wilson's Gun Shop doesn't need to sell one of everything to everybody! Everybody doesn't need a full-house gun and, besides, one of greatest pleasures of a shooter is the development of his talents that leads to newer and better equipment over the years as his skill level grows as it surely will.

This is not to say I'm against "gadget guns." Heavens no! A "race gun" is a magnificent piece of state-of-the-art equipment, and anyone who takes pride in owning the very best should most definitely look at our premium top-of-the-line Super Grade pistol. But my point is that the combat pistol is a series of compromises,

If we could invent the perfect combat pistol, it might have Colt's ergonomic shape, SIG's renowned reliability, Glock's space-age construction... and shoot caseless ammo!



The basic combat pistol has few frills, only practical modifications.

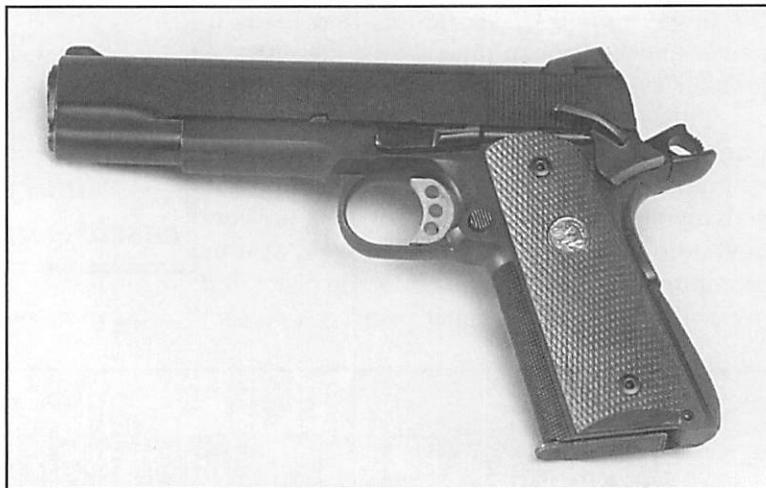
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and one of those is cost. Not everyone wants to spend a fortune on the most refined evolution of the latest combat pistol. Nor does everyone need one.

The key is *purpose*, to analyze your purpose which will determine your needs in your gun. It's all a matter of choice—your choice.

A good example of choosing between different combat accessories for a basic carry gun and a full-house combat competition gun is the extended magazine release button. Every competition gun should have one; no street gun should.

You see, our philosophy at Wilson's Gun Shop is to serve



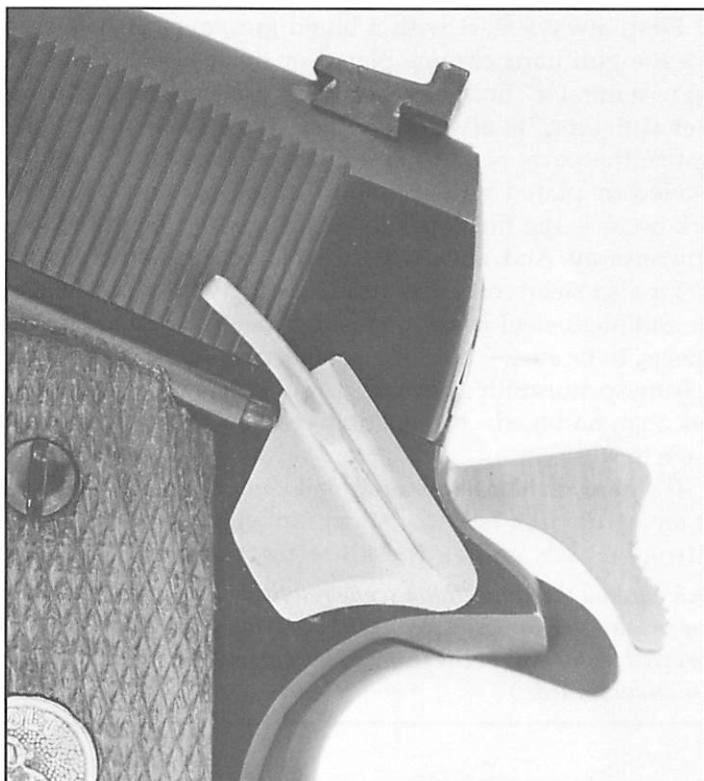
An Ed Brown full-house five-inch that I won as the top overall shooter at the 15th Anniversary Reunion of IPSC in Columbia, Mo.

the customer by giving him what's right for him. We don't want to sell you something you don't need that will just make you regret the whole experience of dealing with us.

If we sell you that extended magazine release button for your street gun and you remove it two weeks later, you're going to be justified in feeling upset that we didn't try to warn you about how potentially embarrassing it is to accidentally drop your magazine in the middle of a gunfight!

Unfortunately, this isn't always as easy as it sounds. Ideally, the new enthusiast to combat shooting would try some of his friends guns or maybe shoot in a few combat matches at his

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An extended safety is a basic modification that benefits self-defense guns and competition guns alike

local club and try some of the other competitors' guns.

You'll find that combat shooters are a really friendly bunch who are eager to help a new shooter get started right. Quite honestly, you are already about ten steps ahead of some of our "beginner" customers simply by virtue of the fact that your interest is great enough that you're reading this book.

The Basic Combat Pistol

Even though there are lots of choices and a number of compromises that can be made on the basic combat pistol, most of the leading combat pistolsmiths offer a basic combat modification package for the venerable 1911 Model Colt pistol. There are some "rules of thumb" that have proven themselves over the years that apply to any gun slated for customization.

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First, always start with a blued gun, even if you plan to have the gun hard chrome plated or finished with one of the "modern miracle" finishes like Robar's excellent NP3. Plating, or other finishing, is always the last step in any modification because the parts need to be refitted afterwards. Supplying a nickelized or plated gun for modification is just adding more work because the finish has to be stripped off before work can begin anyway. And, any extra work just costs you more money.

I'd also steer you away from starting with a stainless steel gun. Stainless steel is an interesting material—good in many respects, to be sure—but for a combat pistol destined for one of the better pistolsmith's benches, you will pay more for the same work than on blued, chrome moly steel because stainless is just a bitch to work on.

It's harder than hammered nails, which makes checkering just an awful lot of fun. It's "sticky" in what we in the trade call galling, which makes the slide-to-frame fit much more *Glock entered the competition scene relatively late with a factory-compensated version. Apparently the Austrian gunmaker wasn't too impressed with IPSC because the 17L Competition Model has since been discontinued.*



GLOCK 17L COMPETITION MODEL 9mm Semi-Automatic
Double Action (Safe Action) Pistol

GLOCK[®] INC. Smyrna, Georgia

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Our #110 Basic Combat Pistol is a good choice for the shooter on a budget, the new shooter or a shooter who wants to avoid the tricky widgets and gizmos of more exotic "raceguns."

tricky. Stainless revolvers are one thing, but stainless auto pistols are another— avoid them unless you want to pay more.

Colt Versus Springfield Armory

Secondly, I advise you to stick with a Colt. I know, I know— everyone says the clone guns from Springfield Armory are just as good, maybe better, but the fact of the matter is that if I lay down a brand-new Colt and a brand-new Springfield Armory and tell you that you can have either one, free and for nothing, which one are you going to pick up?

I thought so.

It's penny wise and pound foolish to skimp on the basic pistol that you're going to spend several hundred dollars, at least, upgrading into a finely tuned combat pistol. If you shop around at the gun shows, you can pick up a good, serviceable Colt for a fair price.

Even if you grit your teeth and plonk your money down for a brand-new Colt, don't you think you're worth the very best?

I do.

Series 80 Versus Series 70

I don't think the choice between a Series 80 and Series 70 is really all that some people crack it up to be. I've heard some skeptics people say that a Series 80 is just junk and you can't get good triggers on them and they're an answer in search of a question.

For those of you who came in late, the Series 80 Colt has a firing pin block that prevents the gun from discharging if it's dropped; otherwise they're identical. Well, let me set the record straight— you can get a good trigger with a Series 80, they're



Fully modified by Jim Garthwait, here's a clean combat pistol and what's on the inside too...

not junk and it's really not such a stupid idea to have a gun that won't shoot you in the butt if you drop it.

Colt recently introduced a Combat Government Model, essentially a standard model with the addition of few very practical modifications. The Combat Government comes complete with high visibility fixed sights, a lowered ejection port, bevelled magazine well, and Pachmayr grips.

Not bad. Not bad at all.

However, there are still enough small glitches that could be corrected that keeps it from being an out-of-the-box success.

If you're going to send me a gun for basic work, don't send

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this one! The Combat Government Model costs a good chunk of change more than a plain vanilla Government Model and it's just a waste to pay more for features that are going to be upgraded anyway in a basic combat package at Wilson's Gun Shop or elsewhere. The Combat Model is a darn sight better than a Government Model if you're not going to customize it, though. It's worth the extra if you're just going to keep it box-stock.

Our recommendations for the basic combat pistol are modifications and accessories that we feel are absolutely necessary for the reliable functioning of a gun that might save your life.

#W10 Basic Combat Pistol Work.

- WILSON COMBAT #3 High Visibility Sights
- WILSON COMBAT Extended Thumb Safety
- Trigger Job with Ultralight Match Trigger
- Funnel Magazine Well
- Polish Feed Ramp and Throat Barrel
- Polish and Adjust Extractor
- Lower Ejection Port
- HD Recoil Spring and SHOK-BUFF
- Magazine Base Pad Installed
- Test Fire

This is the basic package that we suggest not only to police officers and special warfare soldiers but also to beginning combat shooters and civilians. We hope that it goes without saying that we're talking about a .45 ACP.

Understand—there are no curb feelers, no racing stripes and no fuzzy dice on this model. This gun is devoid of cosmetic gussying-up. No frills, just thrills—the basic combat pistol!

The Custom Concept

Guns are a lot like cars— we can both have one of the same model, but that one's yours and this one's mine and we each take great pride in our possessions. It's called "pride of ownership" and those slick Madison Avenue ad agencies know all about it.

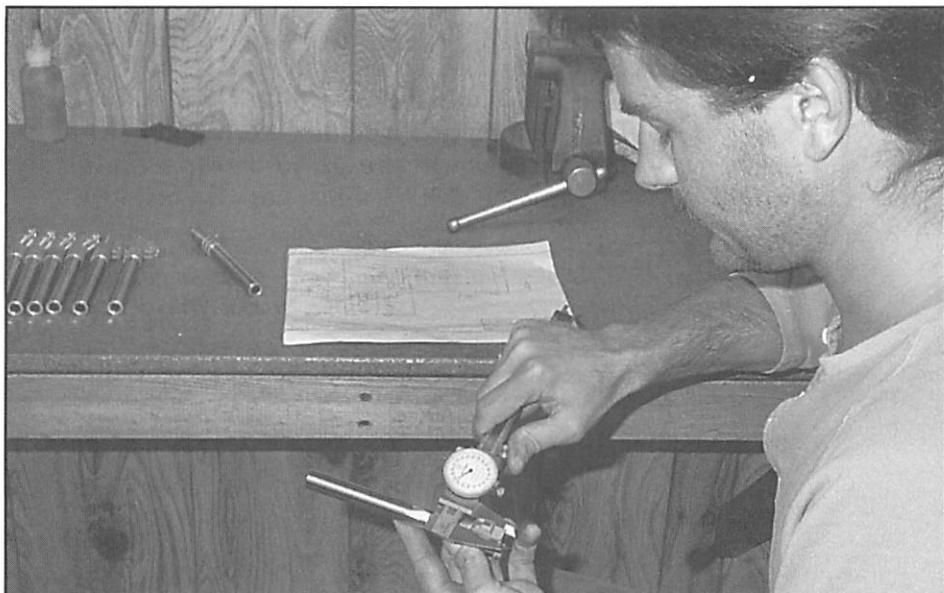
It's what makes people want to write with a \$200 fountain pen when a 29 cent Bic will do just as well; it's why people swish around in expensive designer-clothes when a comfortable pair of Levis will do just as well. And to some extent, it's why a customized combat pistol is so highly sought after.

There's a certain feeling of pride in knowing that you own the very best combat pistol, one that's all yours with your choices of modifications and accessories.

However, guns are a lot different than Levis and Bics because there are very sound and sensible reasons for upgrading a basic 1911 into a custom combat pistol. It's much more than just a high-powered ad agency's campaign for "pride of ownership," it's enhanced performance, greater accuracy, faster handling, improved shootability, lesser recoil, and so forth.

And I'm afraid it's not entirely optional... if you're serious about shooting. The sad fact of the matter is that today's guns as they come out-of-the-box really aren't all that reliable. They're just not what they should be, even at a minimum. It would be like buying that Bic pen without a cap or that pair of Levis

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Jeff Phillips inspects a run of Wilson .38 Super barrels Charlie Petty photo.

without a zipper. They'd work okay, but they're not quite right.

Look, we're not going to get into the issue of why factory-fresh automatic pistols aren't what they're supposed to be.

And we won't delve into why the factories won't listen when we shooters offer to explain what's wrong with the guns. The sad fact is that some guns won't even feed hardball reliably.

The extractor probably isn't fitted properly. Chances are it needs a little more throating on the barrel.

The sights, well, most fixed sights are virtually useless. They're too small so you can barely see them. When you do finally squint and catch a glimpse of the tiny things, they usually don't shoot to point-of-aim anyway.

The trigger feels like a Friday afternoon special when a tired worker threw mis-matched parts together... and then tossed in a handful of sand just for giggles.

Some factory guns are rough, but don't get me wrong—most are still a very good value for the money. The fact is \$1,500+ factory guns simply won't sell, so most gun companies do the best they can within the price levels they must maintain.

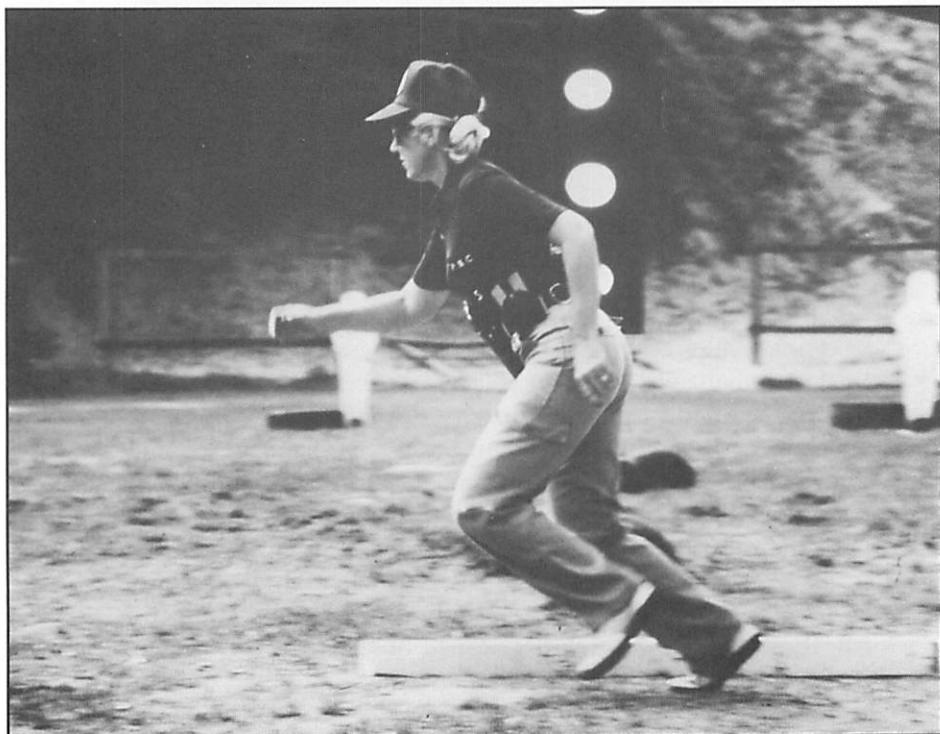
Even so, at the very least a new factory gun needs to be brought up to the level of a basic combat pistol.

But before you send it off to John Q. Master pistolsmith,

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remember that you will void the factory warranty as soon as it's upgraded to what it would have been nice if the factory could have done in the first place. I wouldn't worry too much about the warranty because if you go to a respectable pistolsmith for your work, he will back his work on his own reputation anyway.

Lee Cole, former IPSC Ladies National Champion, sprints to engage the next group of targets. Lee won her title with a custom Wilson Accu-Comp in .45 ACP.



Some gun magazines suggest shooting a semi-auto pistol at least 200 rounds before you do any sort of modifications. I'd rather you didn't.

Get the modifications done first— why put the gun through an initial break-in period when you'll have to do the same thing when you get it back from the pistolsmith?

Yes, even custom combat pistols need to be run around the block a few laps before taking them out for serious racing. Besides, most pistolsmiths prefer to work on NIB guns (New In

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Box).

Here at Wilson's Gun Shop, after we modify a gun we fire approximately 50 rounds through it to make sure everything is fine. We then ship it back to the customer with a recommendation to fire about 300 to 400 rounds as a minimum break-in period before you trust it for either a match or self-defense.

It's important for you to understand what combat modifications you're ordering so that you can appreciate whether you're paying for aesthetic appeal or enhanced



Shop foreman Ron Phillips fitting a slide on one of our Accu-Comps.

Charlie Petty photo

performance.

It might also be nice to make sure that you're not throwing your money away because some combat modifications are worthless, even dangerous.

The more you know about the modifications, the better you appreciate the differences between those that look nice, those that shoot better and those that waste money.

And that, neighbors, is what it's all about.

Safety and Handling

Because of the very nature of the game, practical shooters must be more aware of safety than the average shooter. In practical competition you'll be moving—sometimes running—with a loaded gun, climbing over barricades, drawing from a holster and engaging multiple targets from several different shooting points, all aimed at solving complicated shooting problems.

Safety is the number one consideration for the practical shooter.

Years ago, when he was hammering out the ground rules for practical competition, Jeff Cooper laid down the basic rules for safe gunhandling. Those rules bear repeating here:

Rule One: All guns are always loaded.

Rule Two: Never point a gun at something you are not willing to destroy.

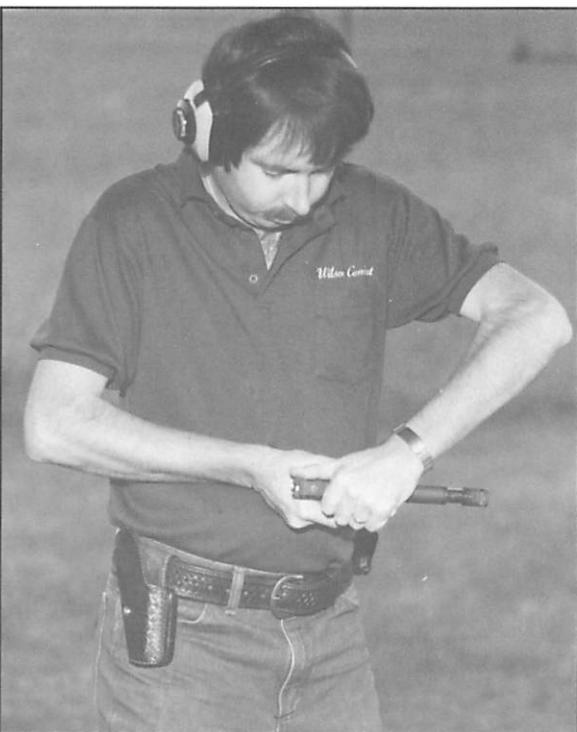
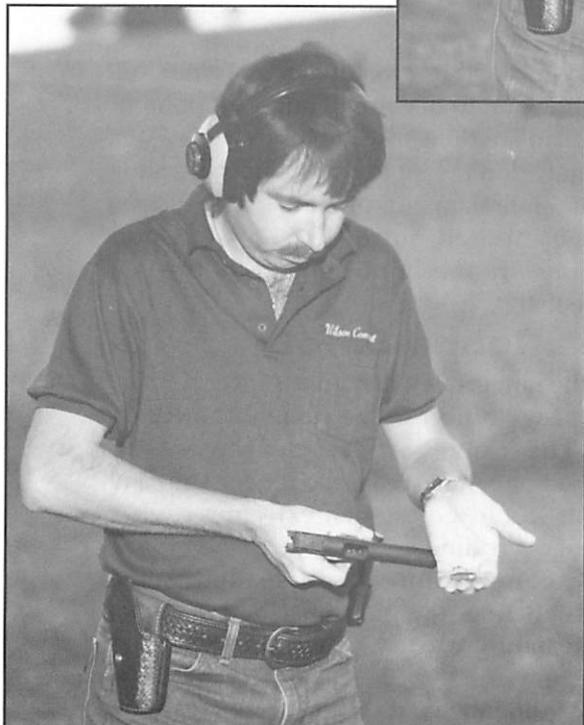
Rule Three: Never put your finger on the trigger until you are ready to fire.

Whenever you pick up or are handed a gun, regardless of the circumstances, your first action should be to check to see if that gun is loaded. If a magazine is in the gun, drop the magazine. Then pull the slide back slightly to see if a round is in the chamber. If a round is in the chamber, jack the slide to eject the round.

This operation should become second nature to you. Next time you're around a top shooter, observe how that shooter is

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To unload safely, drop the magazine and, while keeping the muzzle downrange (left) and your finger out of the trigger guard, take the safety off and retract the slide. The round in the chamber will drop in your hand (below).



constantly checking to see whether the gun in his hands is loaded. Every time you pick the gun up, check it again!

There is no better habit to get into than repeatedly checking to see if a gun is loaded.

S u c c e s s f u l competitors always spend a lot of time dry-firing their guns at home. It is absolutely imperative that the chamber is checked each and every time the gun is picked up for a dry firing session.

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Even world class shooters like Tom Campbell of Team S&W shoot under the watchful eye of attentive Range Officers.

For practicing your draw, where the weight of a loaded gun makes a difference, or to practice speed reloading, purchase or handload several dummy rounds with no primer or powder. Ideally, you should drill a hole through the case to guarantee they stay dummy rounds.

Also, never dry fire a gun without the owner's permission. No, it's not going to hurt the gun to dry fire it, but it's a point of common courtesy rather than anything else.

One thing you definitely don't want to do is retract the slide and let the slide slam home—that's the quickest way to get invited out of the house. Good trigger jobs are too important to be thrown away like that.

There is no better habit to get into than repeatedly checking to see if a gun is loaded.

Range Safety

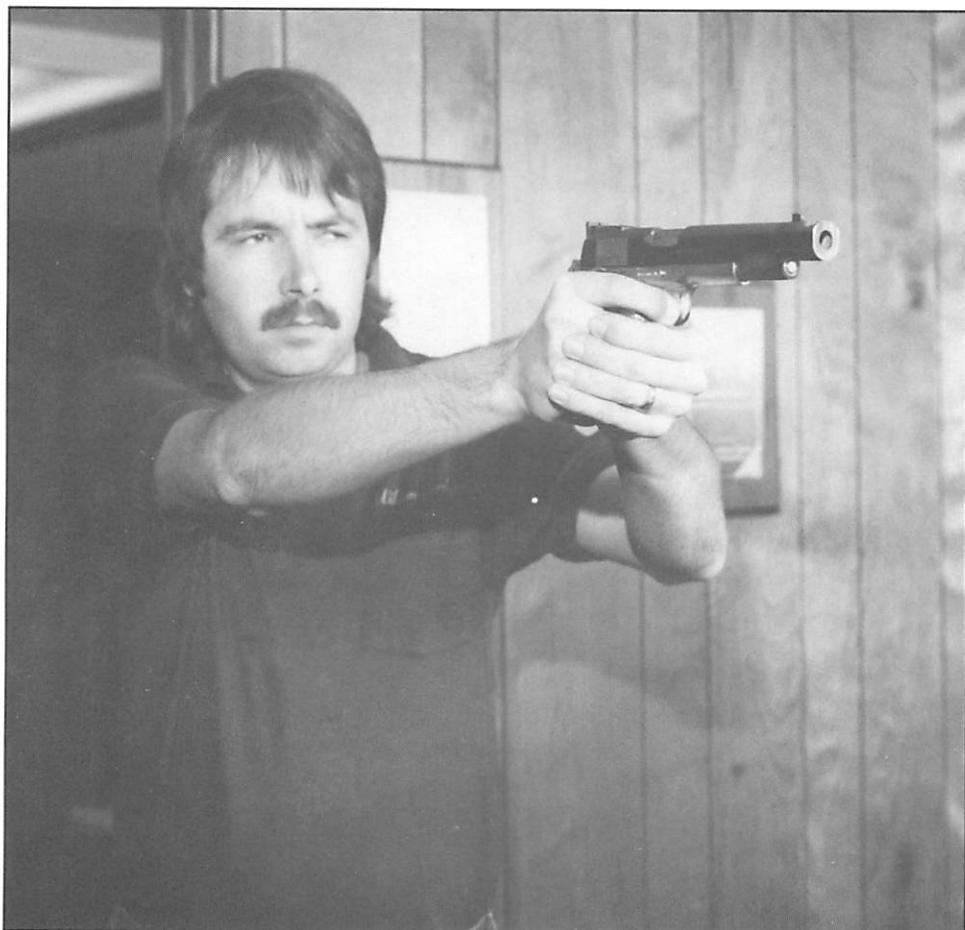
On the range, obey the range officer.

The range officer is the final authority on safety. The range officer can have you disqualified or banned from the range. The only reason he would go to such extremes is that safety is of overriding importance.

IPSC competition specifies that when you're not on the line competing, the gun must be holstered, magazine removed and hammer fully down on an empty chamber.

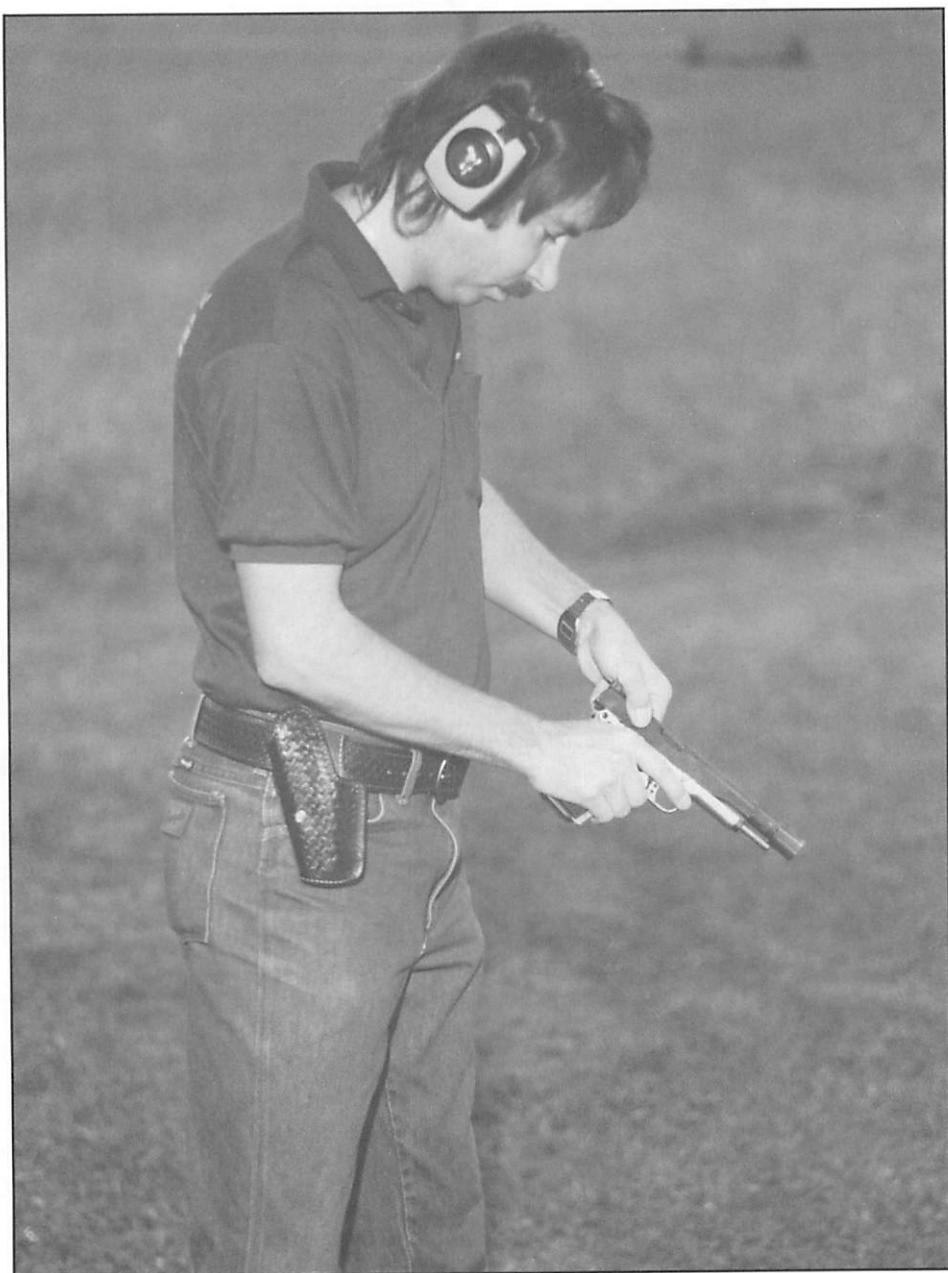
You cannot carry the gun, unloaded or not, around in your

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Dry firing at home is one of the best ways to practice for the range. However, the basic safety rules are just as important, even with an "empty" gun. Always dry fire at a "safe wall" that you have checked to make sure there are no family members behind. Remember, there are two kinds of people who shoot—those who have had an accidental discharge (AD) and those who are going to! Make sure that when yours happens, it's in a safe direction and nothing more than a lamp shade gets destroyed!

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Whenever you pick up a gun, regardless of time, place or circumstance, always check the chamber to make sure it is unloaded!

THE COMBAT AUTOMATIC

hand. Usually, an area is provided for you to examine or handle your gun. Before you start tinkering with your gun, check with a range officer. It's a lot less painful than being disqualified.

Once you step to the line, you'll follow the instructions given by the officer running that line. The range officer will tell you to "Load and make ready," which is the signal for you to load your gun.

Safe Loading Technique

The best procedure for loading a 1911 automatic is this:

Draw the empty gun, then cock the hammer, which will make it easier to retract the slide.

Lock the slide back, insert a fully charged magazine into the gun. Making sure the gun is pointed downrange, retract the slide manually and ease it forward to chamber a round. Put the safety on.

Next, the normal procedure is to eject the magazine, reholster the gun, load one more round back in the magazine to fully charge it, then reinsert the magazine into the gun.

Be sure and remove the gun from the holster before inserting the freshly topped-off magazine! In the old days we would just shove the new mag in the holstered pistol, but today's preoccupation with lawsuits has resulted in a new IPSC rule that prohibits you from loading a holstered gun with a magazine. A little extra safety certainly never hurts.

Always begin every string with a fully loaded magazine, whether it is practice or competition. Make sure your magazine is fully seated! There's nothing more embarrassing than beginning a string, firing one shot and having the hammer fall on an empty chamber the magazine sticking a quarter-inch out of the gun.

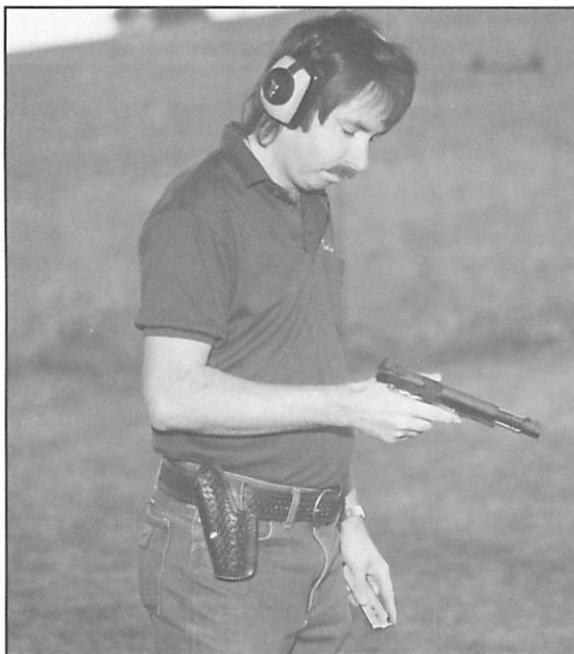
This is especially important if you use a mag funnel or one of the high-capacity magazines, which take a solid hit to seat them.

Competition Preparation

Before each and every string, there is a routine I recommend:

Make sure your magazine is fully seated! There's nothing more embarrassing than beginning a string, firing one shot and having the hammer fall on an empty chamber the magazine sticking a quarter-inch out of the gun.

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locking the slide back, dropping a round in the chamber, then letting the slide slam shut on the cartridge.

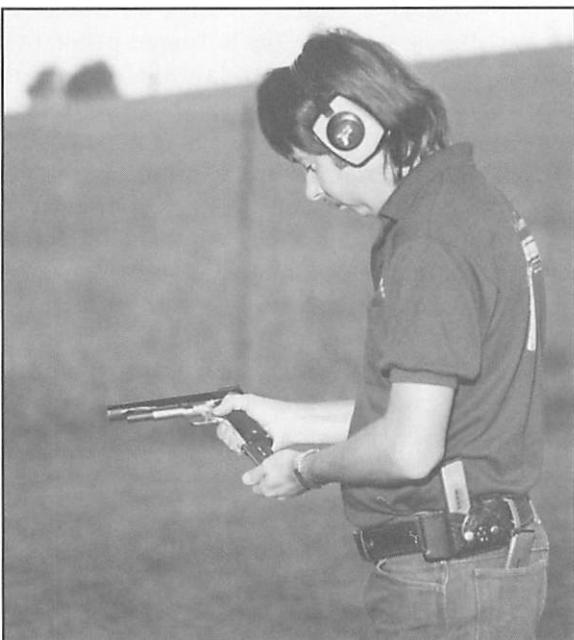
The extractor is not designed to snap over a cartridge; rather, the extractor is designed to allow the cartridge to slide under the extractor.

To drop a round in the chamber and let the slide ram home risks snapping off the extractor hook as well as playing havoc on the extractor tension.

- 1) Check to make sure there's a **round** in the chamber.
- 2) Put the **safety on** and make sure it's solidly engaged.
- 3) Check to see if the **magazine** is seated properly.
- 4) Reholster the gun.

One of the things to avoid doing is

The proper sequence for loading a 1911 pistol begins with (left) keeping the gun downrange, cock the hammer, retract the slide and lock it back. Then (below) insert a magazine.

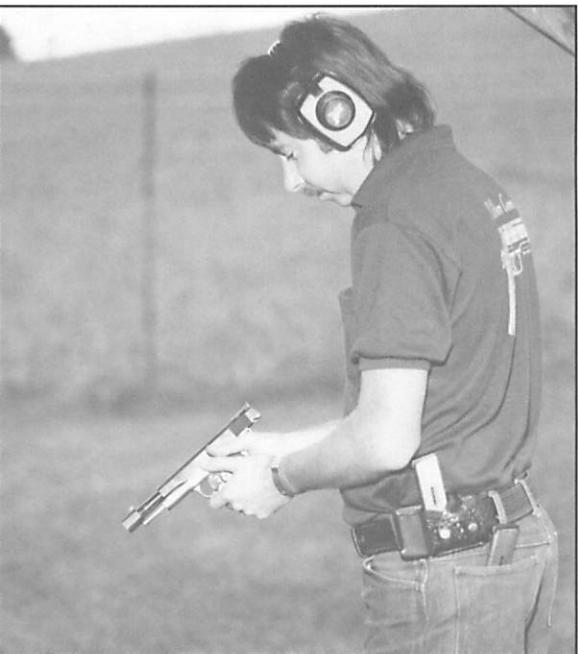
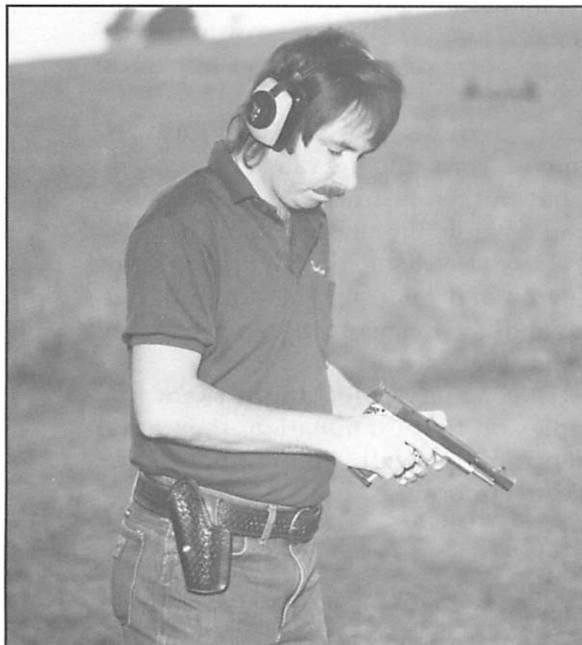


THE COMBAT AUTOMATIC

Safely Handle Jams

While actually shooting, the only handling problem you're likely to have is a jam. Most jams will either be a smokestack jam—a case lodged in the ejection port—which you just wipe out and keep shooting, or a failure to feed a round, which can sometimes be cleared by bumping the butt of the gun hard enough to feed the round.

If you have a feeding jam that can't



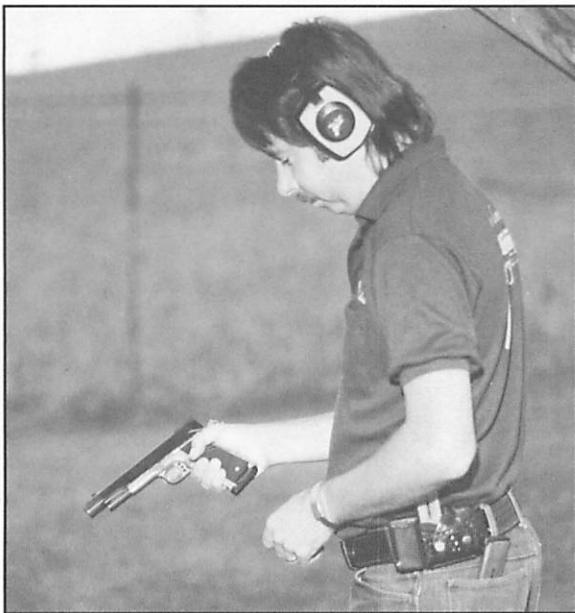
Next, with the magazine in (left) and keeping the muzzle downrange, pull the trigger back (above) and then drop the slide with the slide release button.

be cleared by bumping the butt, drop the magazine, clear the jammed round, reload the gun and keep going.

Anything else risks a double feed, which only makes matters worse.

After you finish your string, do not reholster a hot gun. Usually, a range officer will be there and will

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Now with a round in the chamber, release the trigger and put the safety on. Normally you would now eject the magazine and refill it with one more round, reinserting it back in the gun. Lastly, reholster and be ready!

now locked open and empty. Normally, the range officer will ask to see the empty chamber, then instruct you to lower the slide, drop the hammer and reholster the empty gun.

If the range officer is busy elsewhere and can't get to your position, lock your safety on and reholster the hot gun, but remain facing downrange until the range officer can get to you and go through the unloading sequence.

While much of the IPSC safety rules might seem too complicated or too complex on first examination, they have proven to work exceptionally well. Remember, safe gunhandling is always the first priority.

step you through the unloading sequence.

First, drop the magazine and put it in a pocket or shooting bag. Keeping the gun downrange and your finger out of the trigger guard, slip the safety off and carefully keeping your hand away from the muzzle of the gun, retract the slide, turning the gun to its side, with the ejection port side down, and locking the slide open. The live round will usually fall into your hand.

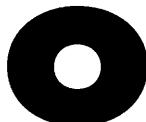
The gun is

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Note the safe gun handling, even on the run. Joanna Fichman has her finger out of the trigger guard and muzzle pointed safely downrange.

Basic Combat Modifications



f the many modifications and customizations performed on combat pistols today, some are absolutely vital, some are totally frivolous but most are somewhere in between. Selecting what might be called "basic modifications" is often a subject that shooters are curious about.

Serrating the rear of the slide is primarily done for cosmetic reasons, although there is an oft-cited "practical" reason for it—reducing glare off the rear of the slide. I don't think that's really much of a concern, though, because if you're looking at the back of the slide, you're looking at the wrong thing anyway!

You'll hear an amazing number of truly creative reasons given by competitors to explain their misses/dropped shots/hostage hits (pick one) but you won't ever hear anyone seriously say, "I missed that Pepper popper because the darn sun glinted in my eyes off my slide."

I think a serrated slide looks attractive, especially if the lines are cut at 40 lpi, which matches those of the rear leaf on a Bo Mar sight. Almost everyone orders serrations with the installation of a Bo Mar and I think it's a wise choice.

If you really want to pull out all the stops, like we do on our best pistol called the Wilson Super Grade, you can have your slide checkered at the rear. This looks a bit

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World champions depend on first rate equipment to win. Good equipment starts with the basics, like a combat reliability tuning. I was world championship 1983 US Team consisting of (left to right) Ross Seyfried, Mike Plaxco, Tom Campbell, Brian Enos, Rob Leatham and Bill Wilson. (Below) A basic modifications is to install a good set of sights like these from King's.



nicer, and it's a way for a shooter to say that his gun is the *ne plus ultra* in terms of the detailing. One thing to watch for on a checkered slide—look and see if the checkering on the head of the extractor matches up with the checkering on the rear of the slide.

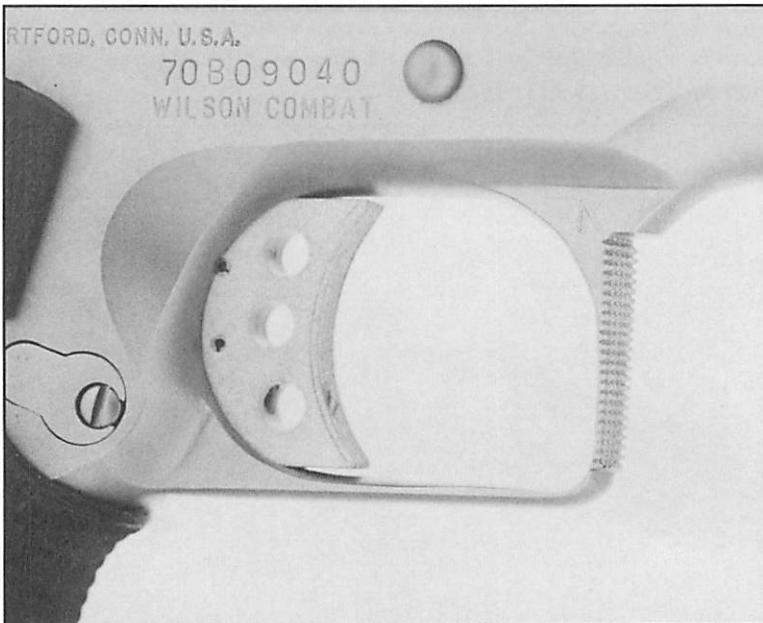
It takes a savvy pistolsmith to get this right because the extractor has an annoying habit of turning slightly and "settling in" after a few rounds are fired, so if the extractor is checkered before it is in its "settled" position, the lines don't match up.

On our Super Grade pistol, we fit two extractors with the checkering perfectly matched up just in case, down through the years, if the owner needs to replace his extractor, then he has one with the proper checkering pattern.

Checkering The Trigger Guard

The sole reason for checkering the front of the trigger guard is to provide a secure, no-slip surface for the

Checkering the front of the trigger guard is only necessary if you use a "finger forward" grip. A squared trigger guard is not as popular as it once was, however.



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The Para-Ordnance wide-body .45 frame has enabled Government Model lovers to retain the basic gun they favor while gaining a high magazine capacity. The PO holds 13 rounds of .45 ammunition.

shooter with a "finger forward" grip. If you curl your weak hand's index finger around the front of the trigger guard, then you should checker it; if not, don't.

Actually, it is a minority of people who hook their fingers around their trigger guards. However, people hear about this or see pictures of it or maybe have a friend whose gun has it, and they'll end up ordering this modification when they never shoot with their "finger forward." Waste of money.

Most shooters have average sized hands, and average sized hands aren't really long enough to get the amount of leverage necessary on the front of the trigger guard that makes the grip work.

The theory, of course, is that the further

Some shooters go so far as to weld a hook onto the trigger guard like some of the European 9mm pistols have. I can't see any utility in that.

BILL WILSON



A Pachmayr Combat Special is still offered today by Pachmayr Gun Works in Los Angeles and is still one of the finest personal defense combat automatics available.

forward on the gun that you can exert force, the greater the leverage you have in holding down the muzzle in recoil. Thus, hook your finger around the trigger guard and squeeze!

But if your fingers are too short, you won't have sufficient strength to gain much benefit in that style of grip and, worst of all, by stretching your finger forward you will actually loosen your weak hand's support of the strong.

I advise against this grip style and against this modification unless you really like it.

Squaring the trigger guard, according to those who shoot with the "finger forward" grip, makes it easier to pull down and back on the gun because the finger doesn't have a tendency to slip downward as it does on the stock

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curved trigger guard. If you're going to checker it, hey, why not go ahead and square it too?

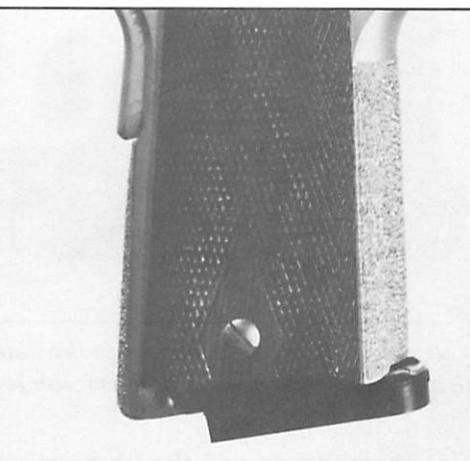
Some shooters go so far as to weld a hook onto the trigger guard like some of the European 9mm pistols have. I can't see any utility in that.

It seems to me that it would result in wasted motion on the draw because you would have to make a point of remembering to place your finger just-so around the trigger guard. This results in an extra motion, slowing down your first shot. It's a trendy thing and I don't even like it cosmetically.

Then again, Chip McCormick won the 1986 and the 1988 Steel Challenges with a large hook on his trigger guard—he and Jerry Barnhart are the only men to ever win twice in the World Speed Shooting Championships! Whatever works for you!

Stippling The Front Strap

Stippling is a low-cost alternative to checkering. If it's done well, it looks almost as nice as checkering, but it's not quite as functional. Unless it's the tiger-tooth stippling done by gunsmith Jim Clark, it's not sharp enough to do a really good job gripping the shooter's hand. The tiger tooth seems to be a little too sharp for holster use, while standard stippling isn't sharp enough.



Stippling is a low cost alternative to checkering.

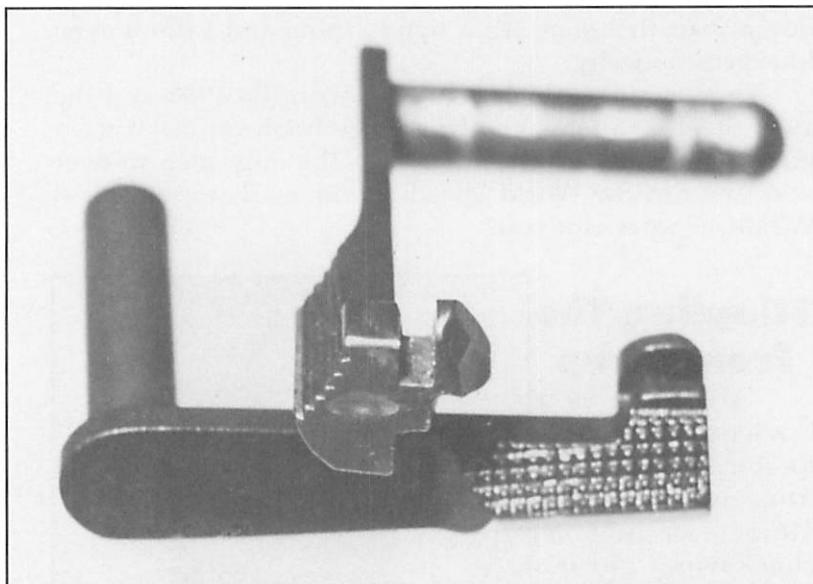
It's a compromise for the shooter who doesn't want Pachmayrs but doesn't want to spend the money for a full checkering job. It's not a very popular option at our shop.

Stippling is done either by hand with a sharp punch or with an air hammer. We use a combination of both, the

air hammer for filling in large areas, the hand punch on the edges.

Cutting A Detent In The Slide Stop

This is an option that many gunsmiths don't offer and many shooters don't understand. The reason many gunsmiths don't offer it is simple—they're not shooters, and they don't see the problem this modification is designed to cure. We actually cut a small detent groove



A detent cut in the slide stop keeps the slide from locking back while firing, an all-too-common problem with roundnose ammo.

into the slide stop so the plunger can snap into it when the slide stop is in the down position.

What this is curing is a fairly common problem with roundnose ammo, and not so frequent a problem with semi-wadcutter. On the feeding cycle of the gun, the round nose of the bullet will lightly tap the slide stop.

Sometimes it's enough of a tap to knock the slide stop up and lock the slide back with ammo in the magazine. The detent adds spring tension so when the bullet's nose taps the slide stop, just a light tap won't pop the slide stop up, since it must overcome the tension.

THE COMBAT AUTOMATIC

This is especially a problem for people shooting extremely hot loads. In fact, a hot load can sometimes cause the slide stop to pop up by sheer inertia. The detent, a small, minor modification, heads off this problem. If you're shooting strictly hollowpoint or semi-wadcutter ammo, this probably wouldn't be necessary.

The reason we began offering this modification, by the way, was it kept happening to me, and we experimented to find the best way to solve the problem. A majority of the people who order this option don't really know what they're ordering—or why.

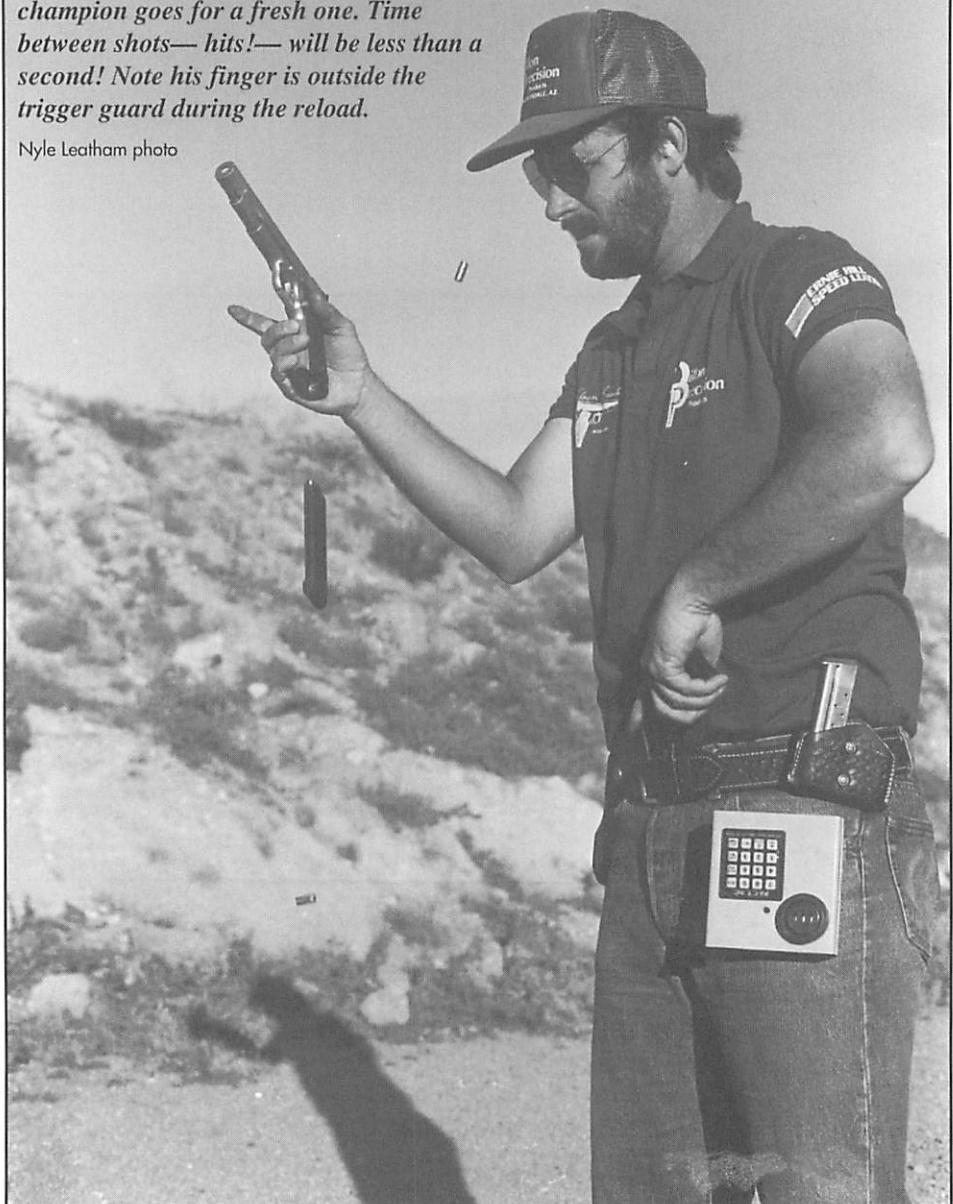


A proper slide-to-frame fit is essential for a reliable and accurate combat pistol. Our full-house five-inch guns feature the same slide-to-frame fit as our basic guns, although there are a number of additional options on the gun shown here that aren't included in a "basic modification" package, such as a Wilson ambidextrous safety, Bo-Mar sights and precise handcut checkering on the front strap and mainspring housing.

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With a brass case still in the air from his last shot, Rob Leatham executes a perfect text-book reload. The spent mag has been ejected as the three-time IPSC world champion goes for a fresh one. Time between shots—hits!—will be less than a second! Note his finger is outside the trigger guard during the reload.

Nyle Leatham photo



Tighten Slide To Frame Fit

You could almost write a book just about this subject. Many shooters feel that if you tighten up a combat gun too much, it's unreliable.

Most good gunsmiths will disagree with this. A properly fitted gun with no play between frame and slide—as long as nothing binds—will be more reliable than an old loose military gun. All the tolerances are kept to a minimum and the same thing happens every time the gun cycles, which is an absolutely critical point.

On a loose gun, the slide might run along the left rail one time, the right rail the next, just rattling around. We have found that full-house guns, with everything snugged up tight, seem to be more reliable than the basic guns with no tightening on them.

The critical point here is proper tightening. In a bad tightening job, the two parts, slide and frame, will bind, creating major problems. On a proper job, there will be no binding problems.

The only drawback to tightening the fit between frame and slide is the gun cannot get quite as dirty as a loose gun could.. and still work correctly.

The basic question is how much are you supposed to shoot a gun between cleanings? Realistically, none of us are likely to be involved in World War One, fighting out of muddy trenches and unable to clean the gun for months at a time. A tight gun properly lubricated will go an easy 500 rounds between cleanings, and some top IPSC competitors go a lot longer than that.

However, I see no reason to shoot an expensive competition gun more than 500 rounds between cleanings.

If you decide to have the slide/frame fit tightened, be sure to have it done by a gunsmith who specializes in combat autos to make sure it's done right. Despite what

A tight gun properly lubricated will go an easy 500 rounds between cleanings. However, I see no reason to shoot an expensive competition gun more than 500 rounds between cleanings.

you may have read, tightening the slide is only a small part of an accuracy job— five percent, maybe, for handheld accuracy.

Of course, if you bolt a tightened gun into a rest, the increase in accuracy is dramatic, because the rest grips the gun by the frame and is perfectly stationary. Slide tightening is really a part of an entire accurizing package, each modification working in conjunction with the other.

For example, if you have a new barrel and bushing fitted, you're not getting full benefit of them without fitting the slide as well. Also, the accuracy job won't last as long, and you're not getting the full benefit of the money you've spent.

Slide tightening is more important to reliability than accuracy. The reason is consistency. To be absolutely reliable, a gun needs to do the same thing on each firing cycle.

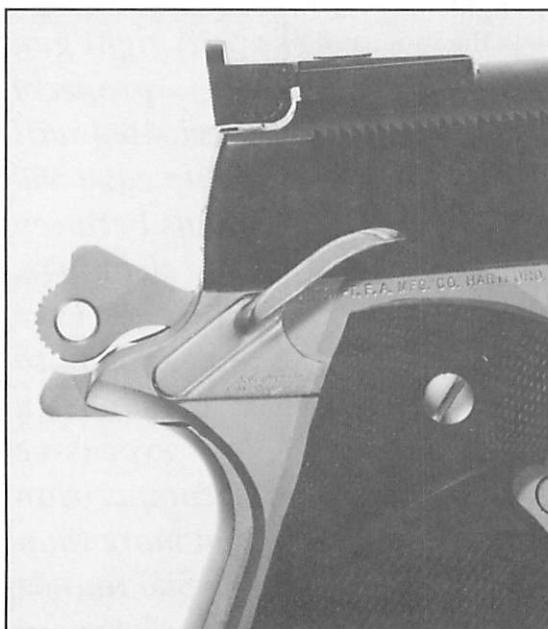
With an old loose gun, that just isn't going to happen. The barrel is flopping around in the bushing; the slide is

rattling on the frame rails; the ejector doesn't hit the case in the same place twice. All those things play havoc with reliability.

I recommend this modification for any gun, whether it's for duty or competition.

Fitting An Extended Combat Safety

Almost anyone involved in IPSC or bowling pin shooting or any "action" oriented shooting game needs some sort



Armand Swenson's ambi safety is the standard by which all others are judged.

THE COMBAT AUTOMATIC

of extended thumb safety. You need it for three reasons— speed, reliability and comfort.

A person with small thumbs needs it for reliability; a person with normal thumbs needs it for speed; and a person with large thumbs needs it for comfort. (And please don't ask me how big is a "small thumb" compared to a "large thumb." I dunno! All I know is that my thumb is bigger than my wife Darla's and both of our thumbs are smaller than Texas shooter John Dixon's, who tips the scales well over the 200 pound mark!)

A person who uses the Jeff Cooper hold with the thumb locked over the safety requires a large safety to rest the thumb on.

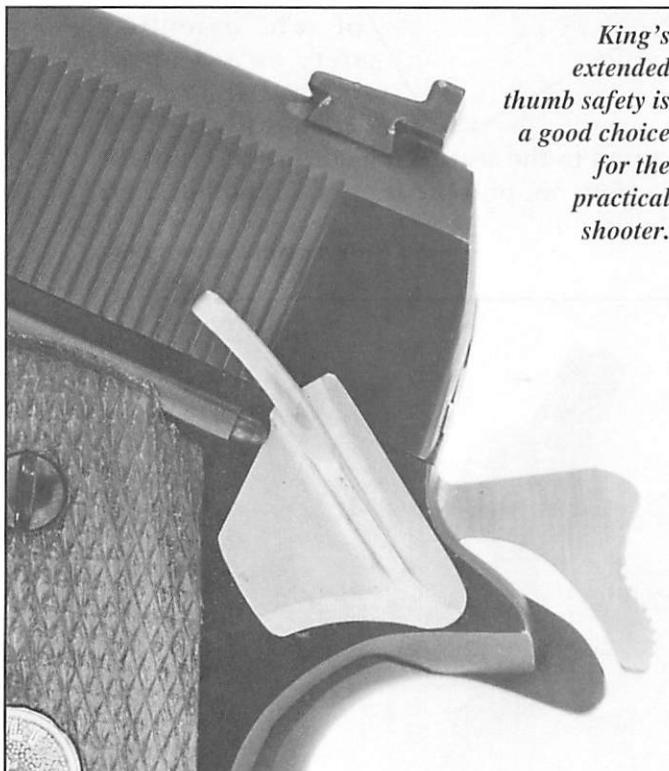
After over 10 years of intensely active competition, I can only think of two occasions where I needed the ambi safety in a match.

King's extended thumb safety is a good choice for the practical shooter.

Shooters using other grips require a wide thumb safety to allow them to easily hit the safety when the gun is drawn out of the holster.

Practical competition requires a wider safety.

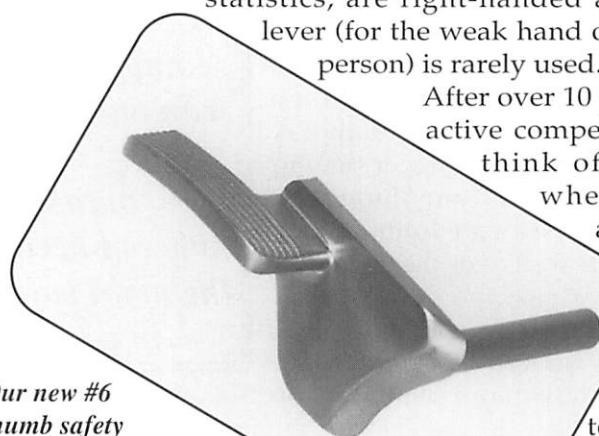
Other than for a left-handed person, the extended right-hand safety is all that's needed. The Swenson ambi safety is,



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of course, very popular, and it looks very good on the gun.

Our new Wilson ambi safety goes the Swenson one better by having a larger lever on the right side than on the left. This is because 83% of the people, according to statistics, are right-handed and the left side lever (for the weak hand on a right handed person) is rarely used.

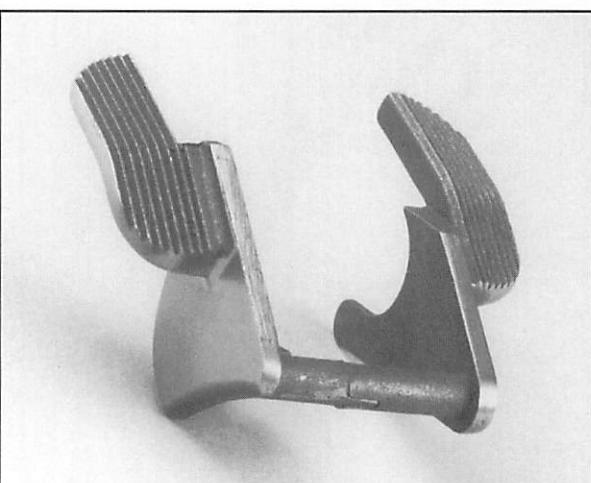


Our new #6 thumb safety features a large lever for quick, positive operation.

After over 10 years of intensely active competition, I can only think of two occasions where I needed the ambi safety in a match. That doesn't really justify the extra cost. There's a tendency to think of an extended safety as a drop-in item, and that's not the case at all. The safety has to be fitted to the sear. If it's not properly fitted, you can put the safety on, pull the trigger a little bit, then when you push the safety off, the hammer will fall—a very dangerous situation.

The safety needs to be installed by someone who understands the workings of

Ed Brown ambi thumb safety



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a .45, not necessarily a gunsmith, because it's not that difficult. But if you have any doubts or don't understand what's going on inside the gun, go to a gunsmith to have the extended safety installed.

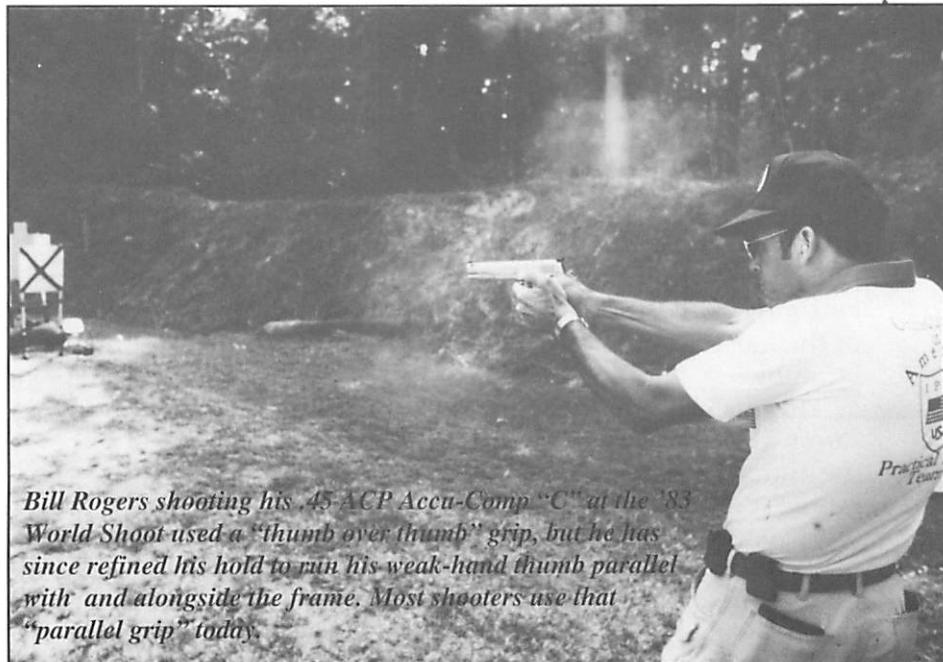
There are several types of ambi safeties now that Armand Swenson's patent has run out on the part. As I mentioned a moment ago, the Wilson ambi safety is very similar to the original Swenson design except that our strong-side lever is slightly wider.

Ed Brown has a nice ambi safety available that has larger levers on both sides, presumably on the theory that the remaining 17% of the people who are left-handed will like his design better!

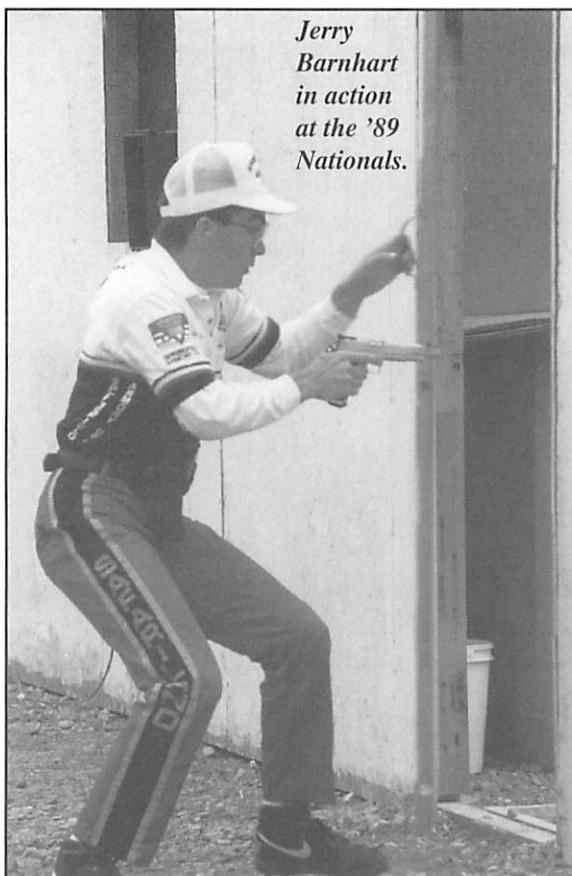
Ed's levers are also contoured differently than the Wilson and the Swenson; all three are well-made quality parts and you, as a free American, are welcome to take your pick of which one you want on *your* combat pistol.

Deactivating The Grip Safety

The grip made popular by Jeff Cooper at Gunsite—the strong-side thumb riding on top of the safety, with the



Bill Rogers shooting his .45 ACP Accu-Comp "C" at the '83 World Shoot used a "thumb over thumb" grip, but he has since refined his hold to run his weak-hand thumb parallel with and alongside the frame. Most shooters use that "parallel grip" today.



*Jerry
Barnhart
in action
at the '89
Nationals.*

weak hand thumb riding on top of the strong hand's thumb— also created a demand for "pinning," or deactivating the grip safety.

When the gun is gripped with both thumbs piled on top of the safety, it creates a small space between the web of the shooting hand and the grip safety. Consequently, the web of the hand doesn't always fully engage the grip safety.

Both thumbs on the safety is not a popular a way to grip the gun.

The most popular grip today

might be called the Lea-nos grip for Rob Leatham and Brian Enos who turned everyone away from Jeff Cooper's preaching of the Weaver Stance with "Two Thumbs Up" and moved the shooters to a much more practical variant of the Isosceles Stance with "One Thumb Up, One Thumb Straight."

In this grip, the strong hand's thumb does ride on the safety while the weak hand thumb lays along the side of the frame, parallel to the slide and point in towards the target. It's both comfortable and natural.

If you grip the gun with the thumb below the safety, there is no need whatsoever to deactivate the grip safety. In addition, I disagree with disabling any of the safety features on the 1911. Our shop doesn't offer this

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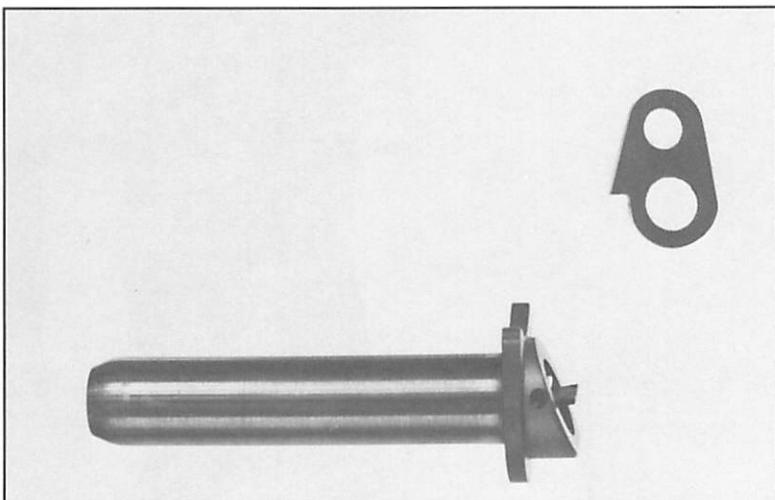
modification, nor do we recommend it.

We offer our new #298 beavertail grip safety that has a raised pad in the hollow to make sure it's depressed. No need to deactivate the beavertail with this one!

"Dwyer Group Gripper" Kit

We were so impressed with this item that we bought the patent to it. It was invented by Dan Dwyer years and years ago to act as a substitute for a match grade barrel, an easy way to get the lock-up on the rear of the barrel consistent.

It replaces the barrel link and the recoil spring guide, and when the gun goes into battery, the Group Gripper



A Wilson-Dwyer Group-Gripper kit is an inexpensive way to get target-grade accuracy out of a standard gun.

forces the rear of the barrel tight up into the locking lugs under a heavy spring tension. The gun returns to battery the same way every time.

It's a remarkably effective little item for the price. Back in the 1960s the National Rifle Association did an accuracy test. They began with a stock, out-of-the-box GI gun and shot it for group.

Then they fitted a target bushing and shot for group; then they added a Group-Gripper and shot for group; then they tightened the slide, added a long link—all the

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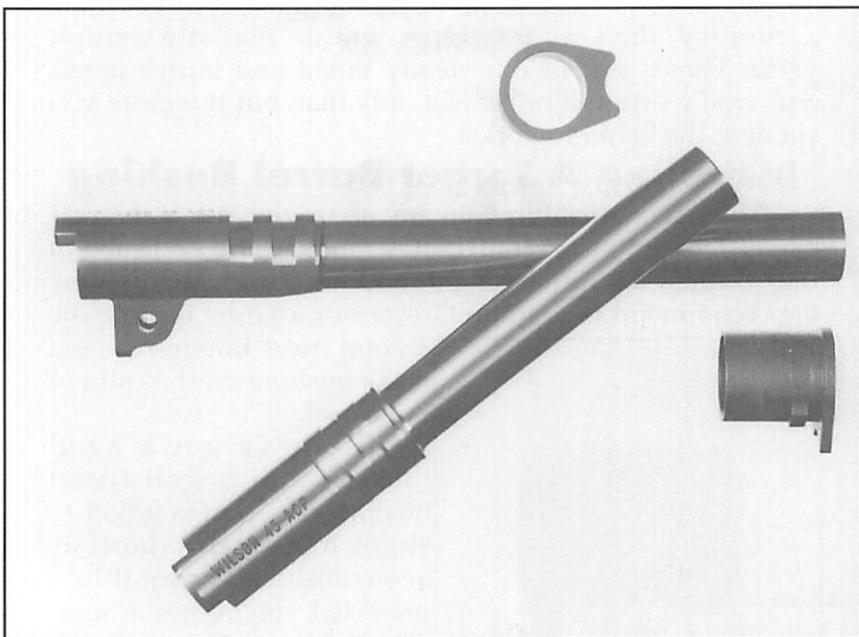
Ray Chapman was one of the first "pro" shooters. Here he is performing a flawless mag change at the 1977 World Shoot in Rhodesia. Ray was sponsored by American Handgunner magazine to represent the US at the '77 World Shoot which was won by Rhodesian shooter Dave Westerhout with a Browning Hi-Power.

THE COMBAT AUTOMATIC

different things that can be done to a .45 to make it shoot better.

They came up with the conclusion that the Group-Gripper resulted in a 27% increase in accuracy. For the price and ease of installation, it's an excellent option for the shooter who doesn't want to go to a match barrel.

At our shop, we don't go into the welding up and refitting of stock barrels. We found the Group-Gripper to work as well, and for the time and effort involved in



Five and six inch match-grade barrels with target bushings are available from all the top barrel makers: Here are two of our Wilson stainless steel match barrels.

rewelding and fitting, we'd rather fit one of the excellent match barrels on the market and be done with it.

We install our Wilson Match Grade barrels available in .45 ACP, .38 Super (with a fully supported chamber) and 10mm. We naturally think our Wilson barrel is the best barrel on the market, but we readily acknowledge that Bar Sto's premium stainless steel barrels are also of exceptional quality.

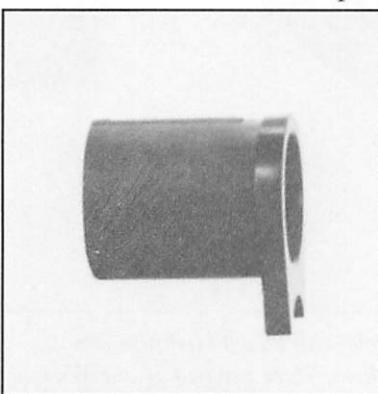
Fred Kart's barrels, the Kart National Match barrels, are again of the sort of superior quality that set Wilson and Bar Sto barrels apart.

Regardless of whether you want a match barrel fitted or the Group-Gripper, we approach action jobs in two ways: We do an economy job, which gets the gun shooting plenty well enough for anyone except top competitors, and then we cross the line into full accuracy jobs with match-grade barrels and super-careful handfitting.

If you've got a stock gun that you'd like to shoot more accurately, the Group-Gripper will do that at a modest price. This is one of our steady bread and butter items, and well worth the price. Not only that, but the more you shoot it, the better it works!

Installing A Target Barrel Bushing

The most crucial item in any accurizing job is the rear barrel lock-up. That contributes more to the accuracy of the .45 than any other single modification, which is why we recommend the Group-Gripper or a target barrel. The



The Clark target bushing is one of the best around, but it needs to be fitted by someone who knows what he's doing.

second most important item is the bushing on the front of the barrel.

If you've got a good lock-up and a well-fitted bushing, the gun is going to shoot hand-held about as accurately as possible... provided you've got a high-quality barrel. The next step is fitting the hood, and we've found width is more important than length, and neither is that critical.

Finally, slide tightening gets that last ounce of accuracy out of the gun. The

last two items probably amount to an extra half-inch off the group at 50 yards on the average.

We've found that many people prefer to change the collet bushing that comes with the Colt for a solid target bushing, because the collet bushing is likely to break. The

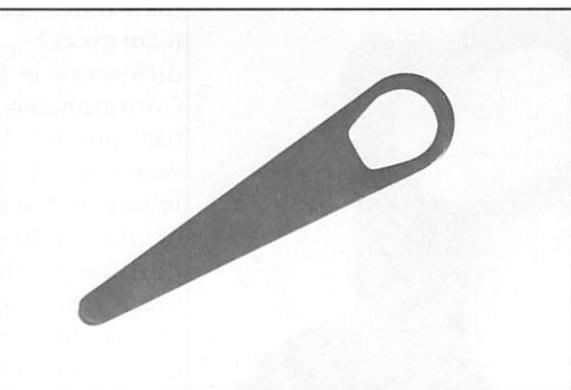
THE COMBAT AUTOMATIC

little metal "fingers" that make up the bushing are especially prone to failure if the face of the slide is out of square.

If that face is square, chances are the collet bushing will never break. If it breaks once, you can figure it's going to continue breaking bushings in the future. If your gun's collet bushing has broken once, definitely replace it with a solid target bushing.

Of course, the safest path is to replace it before it has a chance to break, and that's what I've done to my own guns since I don't trust the collet bushing. For a match gun, I guess

it's not that crucial, but for a police service-gun or for a self-defense pistol, I wouldn't dare run with a collet bushing on the old theory that an ounce of prevention is worth a pound of cure.



A barrel bushing wrench is essential for tightly fitted target bushings.

Irv Stone at Bar-Sto at one time made collet bushings for his barrels, and he's discontinued them because the slides vary so much. A solid bushing is more dependable all the way around.

The collet bushing is good on accuracy, which, of course, is why Colt began using them again, if the slide is not quite right, it can cause some of the fingers to bind, which adversely affects accuracy, stringing the shots up and down or side to side.

An advantage of a fitted target bushing is that it's a tight fit between bushing and slide and bushing and barrel. Collet bushings fit loosely in the slide but tightly in the barrel.

Fitting A Commander Hammer

A Commander hammer is mostly cosmetic. It is also one of the most popular options that any custom gunsmith offers. Just about anybody who gets a gun built wants a Commander hammer on it. It has a practical advantage over the stock hammer in that a shooter with big, fleshy hands won't get his hand pinched by the hammer. Of course, you can bob the stock hammer and get the same effect.



Wilson's #299 Commander hammer with an extra large slot.
brand.

Today there are Commander hammers and then there are... Commander hammers! The basic difference is that a standard Commander-style hammer, like our #9, is machined to exact Colt specifications where as the new generation of ultra-deluxe Commander hammers, that cost up to three times as much as our standard version, are precision-honed in the hammer hooks to give a better and longer lasting trigger pull. The slots, or holes, in these expensive hammers are quite radically shaped compared to the round hole in the standard Commander hammer. This is purely cosmetic and it's up to the individual's taste in selecting one, be it our Wilson design or another

When a Commander hammer is fitted to a standard grip safety, the grip safety needs to be dished out slightly to accept the hammer, which is a minor modification. Our customers usually specify a beavertail grip safety, which doesn't require such a modification.

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The hammer can be interchanged with the stock item, but if you've got a trigger job, you're going to have to go back to a competent gunsmith to get the trigger pull readjusted. Anytime you change any part of the trigger/sear group, the trigger pull must be reworked.

The Combat Trigger Job

There are a lot of different ways to do trigger jobs, and there are a lot of different match triggers available. There are two basic kinds of trigger jobs—the combat trigger job and the bullseye trigger job.

On a bullseye gun that's only going to shoot match wadcutter ammunition, you can cut the sear engagement down to .016" to .018" remove all the take-up out of the trigger and polish it so that it's really light. You also have



The heart of a combat pistol, like this full-house Accu-Comp "C," lies deep within the gun—a good, crisp trigger job.

to be very careful with who shoots it because a so-called hair trigger is not safe in inexperienced hands. It takes a competent, skilled person to shoot the gun and even then he's got to be very careful with it.

We've all seen the shooter with a sheepish look of surprise on his face after he touched one off accidentally

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from the ultra-light trigger pull. He looks around to see if anyone noticed his embarrassing AD (accidental discharge) and then smiles weakly if you did.

A pound-and-a-half trigger pull might be alright to brag about to your friends to demonstrate your pistolsmith's prowess, but it's really not a good idea for shooting. Perhaps the greatest of all "trigger men," Mickey Fowler, doesn't like his trigger set that light. Most serious IPSC shooters like a pull in the 2.5 to 3.5 pound range.

We don't really offer the bullseye ultra-light type of trigger job, and that's not the type of trigger job that



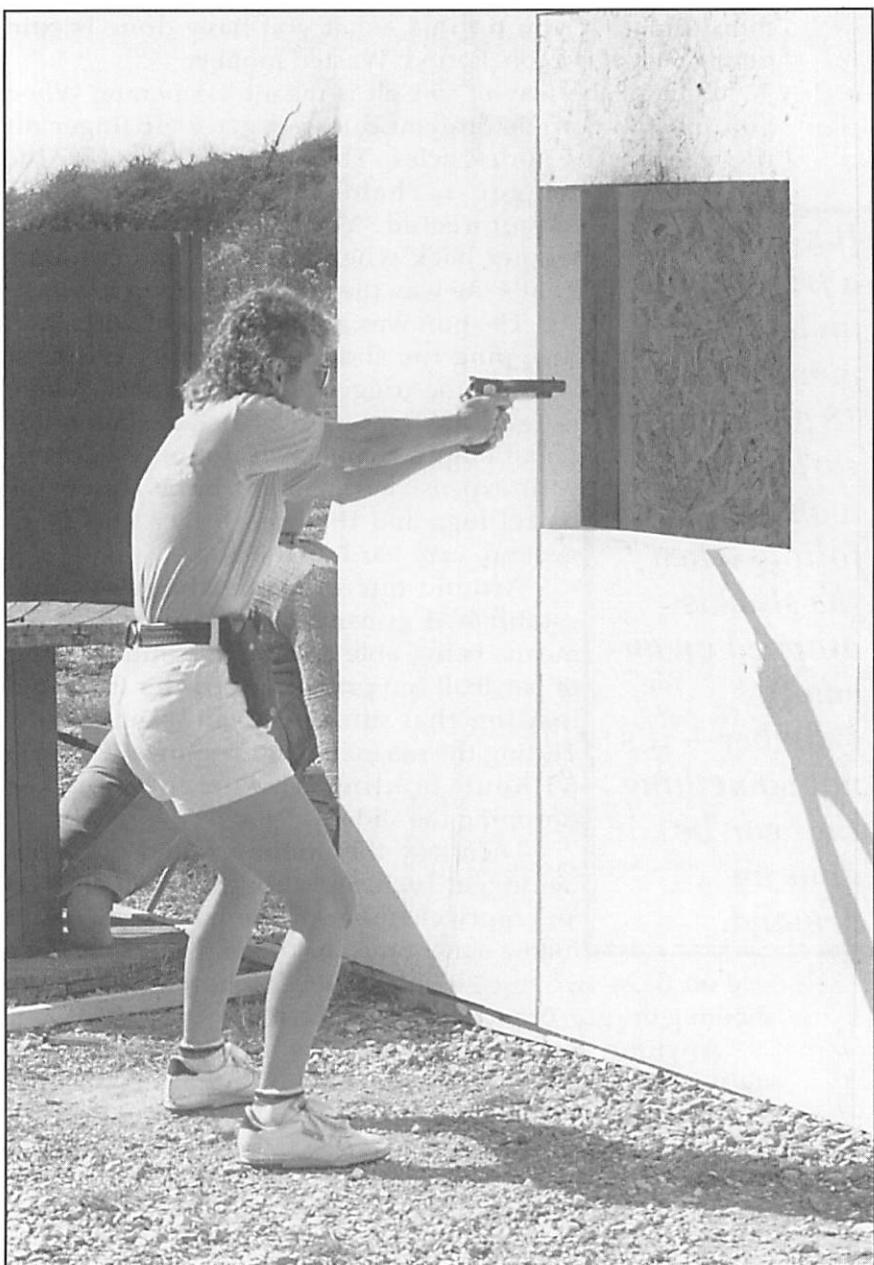
The Wilson Accu-Comp "LE" has won more national championships than any other brand. The only gun that's giving it a run for its money is our new Wilson "Super Grade" Accu-Comp, which won the 1990 Nationals with Jerry Barnhart at the controls.

should be on a combat gun.

On our trigger jobs, we leave a lot of engagement on the hammer hooks, because we're building primarily combat guns. Our standard specs are 3.5 to 4 pounds for the pull.

Contrary to what has been written, the first thing you should do when you get your gun back is not drop the slide five or six times to see if the hammer will follow. If the hammer doesn't follow—that is, ride down to the half-cock notch when the slide falls on an empty chamber—the first time, it will after you drop the slide three or four

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Debby James of Team Colt has captured every one of her two world titles and three national titles with a Wilson Accu-Comp pistol.

more times! If you do this, what you have done is ruin your new trigger job. Period. Wasted money.

Look at the way a .45 Colt is meant to operate. When you fire the gun, before you can ever get your finger off the trigger, the slide cycles. The slide cycles while the trigger is held back; everything is disconnected. You're still holding the trigger back when the slide slams home. That's the way the gun is designed to work.

***It's hard to get
a trigger pull
under four
pounds with an
18 pound recoil
spring that
won't ever
follow when
the slide is
dropped on an
empty
chamber— it's
not something
that can be
done on
demand.***

The gun was not designed to withstand dropping the slide on an empty chamber without the trigger being held back. There is never any reason to let a slide slam home on an empty chamber. It not only destroys your expensive trigger job, but it batters the barrel lugs and the breech face and is, in general, very hard on the gun.

Around our shop the shops of other established gunsmiths, a safe trigger job means being able to take a dummy round of hardball (no primer or powder in it) and loading that one round in a magazine, putting the magazine in the gun and then—without holding the trigger back—dropping the slide.

Then take the dummy round out, hold the trigger back, and drop the slide once on an empty chamber. If the hammer doesn't follow either time, the trigger job is safe. If it's

safe on those two tests, it should never follow when you're shooting the gun or properly handling it.

Anytime you shoot the gun dry, drop the magazine, slide in the new magazine, then holding the trigger back, trip the slide's release with your left thumb (another reason you don't need an extended slide release, which we'll go into more later) and there you go. It's totally safe—exactly the way the gun was designed to operate.

We very rarely send a gun out with a hammer that will follow even if you do everything wrong and drop it on an empty chamber. Just remember, if you insist on dropping the slide on an empty chamber, you're going to

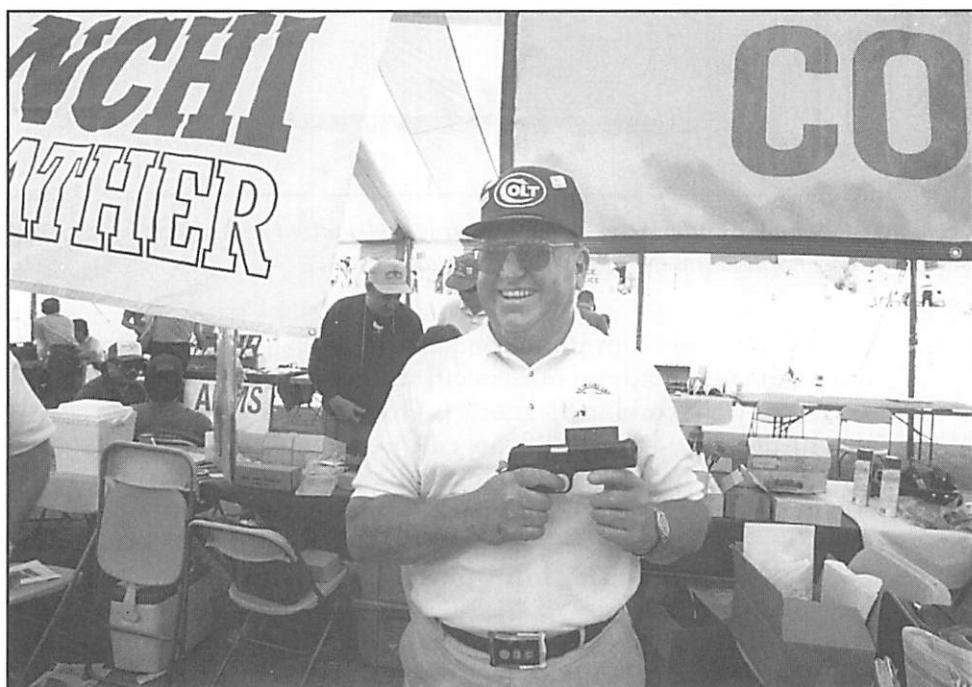
THE COMBAT AUTOMATIC

batter the sear nose and hammer hooks so much that it will eventually follow.

It's hard to get a trigger pull under four pounds with an 18 pound recoil spring that won't ever follow when the slide is dropped on an empty chamber—it's not something that can be done on demand. Some guns will work out that way, but it's not something you can necessarily repeat on every gun.

A trigger job is probably the one modification for

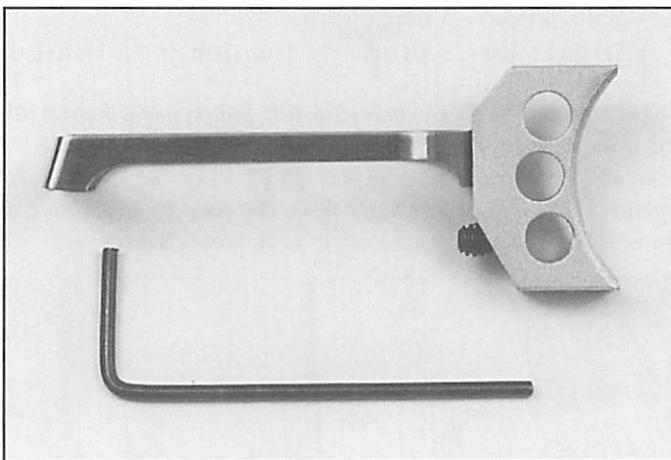
Six-time national bullseye champion Bill Blankenship knows all about good trigger jobs! The well-respected and enormously popular champion now is retired from Colt where he worked with competitive shooters and helped spread the good word about Colt Firearms, like he's doing here at the 1990 Steel Challenge.



which estimating the time that will be involved is the most difficult. Sometimes everything will go just right, and the whole trigger job takes 15 minutes. Sometimes it takes four or five hours.

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If we get a trigger job in that somebody has botched up badly, we replace the hammer and sear and start over. It takes someone who knows about a .45 to do a reliable trigger job, and it's the job of the gunsmith to educate the shooter as to what that shooter can reasonably expect from the job.



The Wilson Combat match trigger is skeletonized with a pad of aluminum to reduce trigger "bounce back."

We use only aluminum, match grade triggers, and we have our own made to our specifications. The reason for a skeletonized "combat trigger" is that the lighter trigger, the lighter the safe pull you can get. One of the main reasons for a hammer dropping to half-cock is the weight of a heavy trigger bouncing back to the rear and tripping the sear.

A skeletonized aluminum trigger is just a better mousetrap.

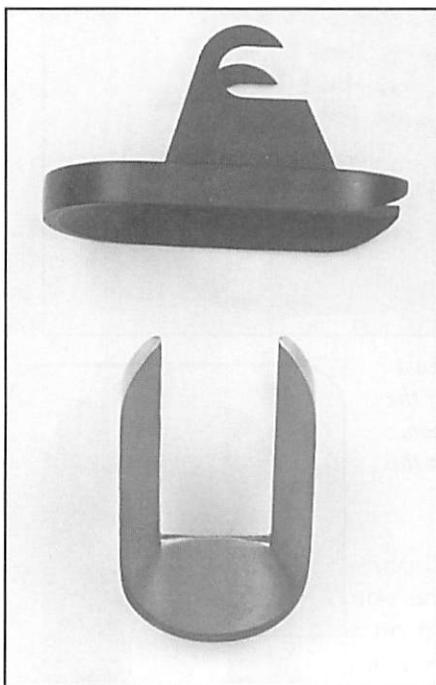
It's difficult to get a trigger pull much under four pounds on a gun with a steel trigger and keep it totally safe. I don't see any advantage of the more expensive carbon-fiber or titanium triggers over an aluminum trigger; light is light, after all, and a skeletonized aluminum trigger is plenty light enough to get a good, safe trigger pull.

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Most IPSC shooters will probably not need a trigger pull lighter than 3.5 pounds. A trigger pull like that will also last the life of the gun, and that's important in terms of value. It is possible to get two, two-and-a-half pounds with no take-up, but only for a very experienced shooter and even then usually for matches like the Bianchi Cup, where you're only shooting .38 Super light loads with light recoil springs. However, these super-light trigger jobs usually have to be carefully maintained.

Enlarging The Magazine Well

This is another one of the "gotta have it" modifications. There are a lot of different ways to funnel magazine wells: 40° bevels, 60° bevels, radiusing the



The Wilson custom mag well is a simple, inexpensive way to faster reloads.

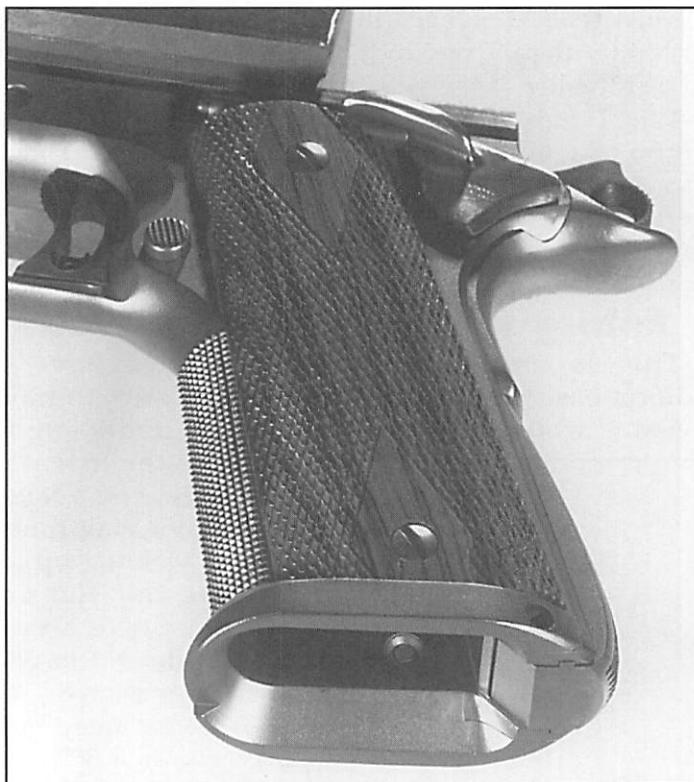
frame. However, if you forge one out or do any welding, you could conceivably weaken the frame by altering the heat-treatment.

inside of the magazine well, adding on a Rogers E-Z Loader mag funnel, or even welding up and swaging out the mag well like Steve Nastoff and Jim Boland have so tastefully mastered.

All you need on a carry gun is a 50° angle or more. If you want a bigger hole to hit than that, go to a Rogers E-Z Loader rather than forging or welding on your frame. Six-time national champion Rob Leatham won a lot of matches with his Wilson Accu-Comp fitted with a stainless steel E-Z Loader.

Funneling the magazine well does no harm whatsoever to the

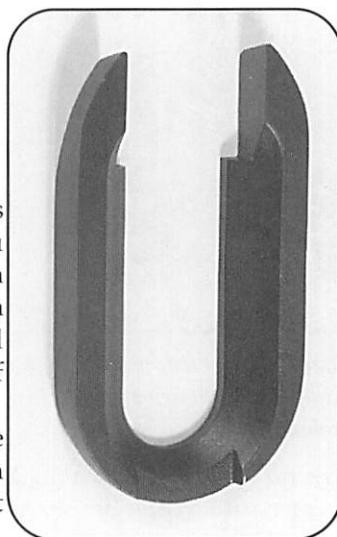
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An Ed Brown mag funnel must be welded onto the bottom of the frame. The part is fairly cheap, but the labor is expensive on this modification.

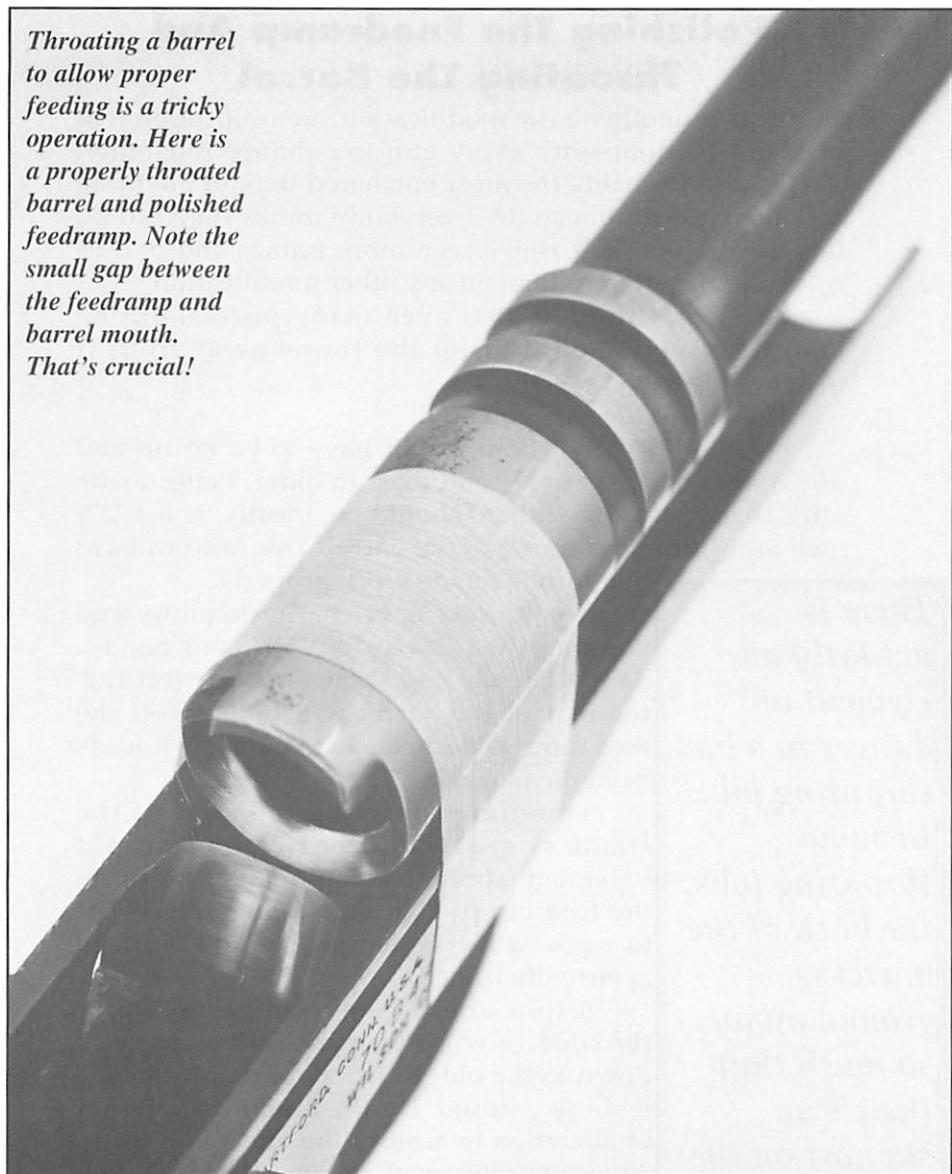
One of my basic philosophies of gunwork is that anytime you can keep from putting heat on a gun, do so. The gun comes from Colt pretty well heat-treated and any time I can keep the torch off the gun, the better off the gun is.

You can build a full-house gun and never once put heat on the gun. Why not do it that way?



THE COMBAT AUTOMATIC

Throating a barrel to allow proper feeding is a tricky operation. Here is a properly throated barrel and polished feedramp. Note the small gap between the feedramp and barrel mouth. That's crucial!



This is a modification that would benefit anyone, whether for duty or combat or even bullseye shooting.

Polishing The Feedramp And Throating The Barrel

This is another basic modification, a modification that needs to be done with every gun to enhance reliability. This is also probably the most butchered item of anything a kitchen gunsmith can do. Everybody thinks they can do this themselves, and we've seen more frames and barrels ruined in the attempt than on any other modification.

The worst thing is that even many pistolsmithing books say you should grind the frame away until it matches the barrel exactly.

That is not the way you do it!

For that to work, there would have to be no up and down play in the barrel—and even in older, better-made guns that's rare. What there should be, ideally, is a 1/32-inch jump from the frame to the barrel. You need to have that for the gun to work properly.

If you don't have that little jump, and you merrily grind away with your handy-dandy Dremel tool to make a "perfect fit," the rear of the barrel will pull up off the feed ramp and catch a lead bullet as it feeds from the magazine.

Sometimes only the top part of the frame is ground away by our intrepid basement 'smith, leaving a slight hump in the feed ramp. That gun is guaranteed not to work with even hardball! And the frame is virtually ruined.

A gun doesn't have to be radically throated to work properly. It comes back down to the old K. I. S. S. principle—keep it simple, stupid. Do the minimum amount of alteration to achieve the effect you want. Anything more is at the very least wasted, and at the worst harmful.

All that has to be done to throat a stock Series 80 Colt Model of 1911-A1 is to first polish out the factory's tool marks; if the gun happens to be one with very deep

There is actually an element of danger in a bad throating job. In some throating jobs, the back of the barrel is ground away so much that there's no support on the back of the case. The result is that the gun blows up.

THE COMBAT AUTOMATIC



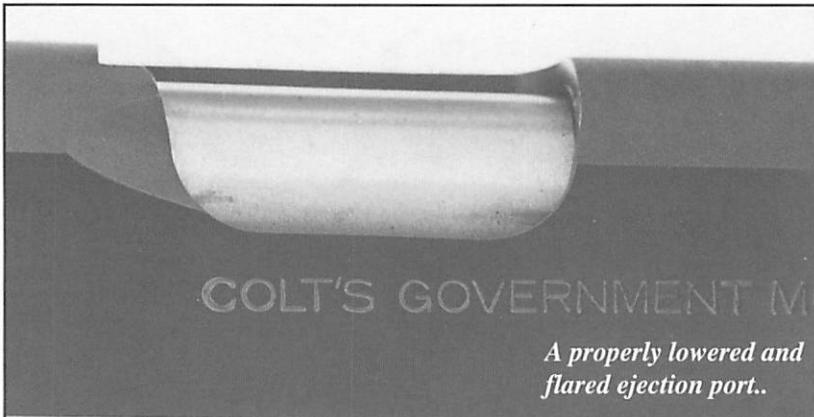
A nice battery of .45s belonging to American Handgunner's practical shooting editor Dave Anderson. A full-house five-inch Colt Gold Cup and a Colt Commander both ride in Milt Sparks "Roadrunner" holsters.

marks in the feed ramp, you don't even polish them all out. Try not to remove any more metal than you have to, and be sure not to change the angle at all. The angle of the feed ramp is absolutely critical.

The only time you need to remove any metal is when the gun itself has excess material—more than the 1/32-inch jump between the barrel and ramp. Then you just polish until you have that jump and keep the angle exactly the same as it was originally.

On the barrel about all you do is just polish the throat, and right where the round breaks into the chamber—right at the chamber mouth, you give that a slight radius and get that very smooth. You can't leave a sharp edge right there. It's got to be radiused to guide the round in smoothly. That's really all that's necessary with good

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ammunition.

If you want to shoot a Hornady 200-grain CT bullet, the gun will have to be throated really radically to get it to feed consistently. I don't suggest going to a radical throating job for the ammunition. Better to change the ammunition.

If you work at it, you can probably find some kind of ammo that won't feed. Realistically, if your gun will feed hardball, 185-grain hollowpoints, and the Hensley & Gibbs #68 200-grain semi-wadcutter bullets, you've covered probably 99% of all the fodder your .45 will see in a lifetime. Why insist on doing special modifications to the gun to get it to feed a basically unreliable bullet?

Also remember that throating isn't the only factor involved in reliability. Short bullets are basically very magazine-sensitive. A short round might feed with some magazines, but not others. When you shorten the overall length of your cartridge, you have to choose your magazines accordingly.

Finally, there is actually an element of danger in a bad throating job. In some throating jobs, the back of the barrel is ground away so much that there's no support on the back of the case.

The case can rupture, sending hot gases down the magazine well, which in a worst case scenario can ignite the next round in the magazine. The result is that the gun blows up.

More than likely, you'll just walk away with "Super

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Face." You don't have to worry about throating a .38 Super "fully supported" barrel because the feed ramp is integral with the barrel and runs directly into the chamber.

If you do happen to have a blow-out from an overly ambitious throating job on a .45 or 10mm barrel, hope you're wearing Pachmayr's that day. They just bulge out because Pachmayr grips have steel inserts which protect your hands from the violently expanding powder gases exploding down the mag chute. Wooden grips splinter, and the explosion drives the splinters into your hand.

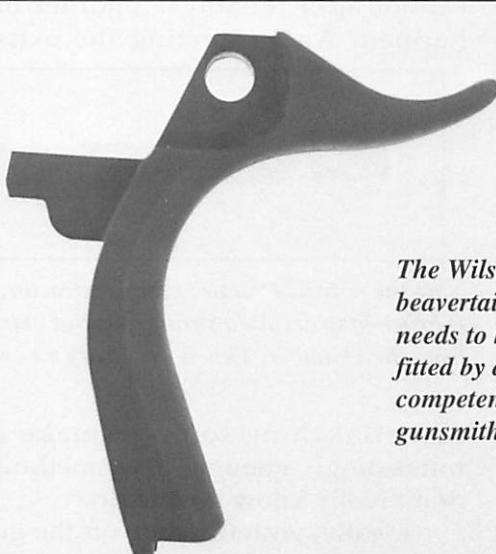
Sure, chances are that with the low-pressure .45 round, all that's going to happen is the case is going to bulge a little, but I have seen a gun blow up in the way described above. It is worth the risk?

We guarantee our guns to function with any factory round other than the Hornady 200 CT that approximates the length of hardball. If you want the gun to feed the shorter rounds, then you're going to lose case support and must use magazine with SWC-type feed lips.

Lower The Ejection Port

This is another one of the necessities. A lot of people say, "Why lower the port if the gun ejects, just because it bends the cases?" If the gun is bending brass, then it's just a matter of time until a brass case hits the side and doesn't get out of there. It is a malfunction waiting to happen.

It's a very minor modification, and, if properly done—that is, not cut to more than a half-inch from the bottom of the



The Wilson beavertail needs to be fitted by a competent gunsmith.

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slide—doesn't weaken the slide in any way.

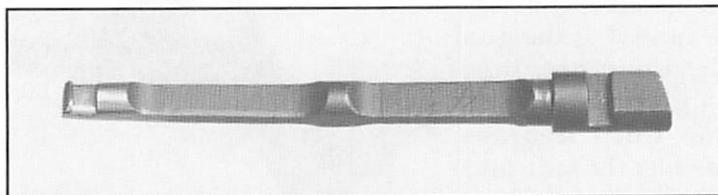
It's simple, and you get not only improved ejection, but brass that isn't bent at the mouth, which is important to handloaders. Given the price of factory ammo, we're all handloaders.

You don't have to worry about this modification as much on newer Colts because the folks in Hartford finally, after 70-odd years of making the Government Model, realized that the gun could stand to have its ejection port lowered. Today's Colt pistols all come with a lowered ejection port whereas only the Gold Cup used to offer that modification as standard equipment. The port area usually still needs a little cleaning-up work though.

Adjusting The Extractor

This is one of the most misunderstood modifications, and it will keep the gun from working with hardball right out of the box. If the extractor is properly shaped and adjusted out of the box, almost any Government Model works with hardball every time. Such, unfortunately, is not the case.

In our experience, there is no attempt made to adjust the extractor. If there's no tension on the extractor, the gun cannot eject reliably—another malfunction waiting to happen. And adjusting the extractor is a simple and

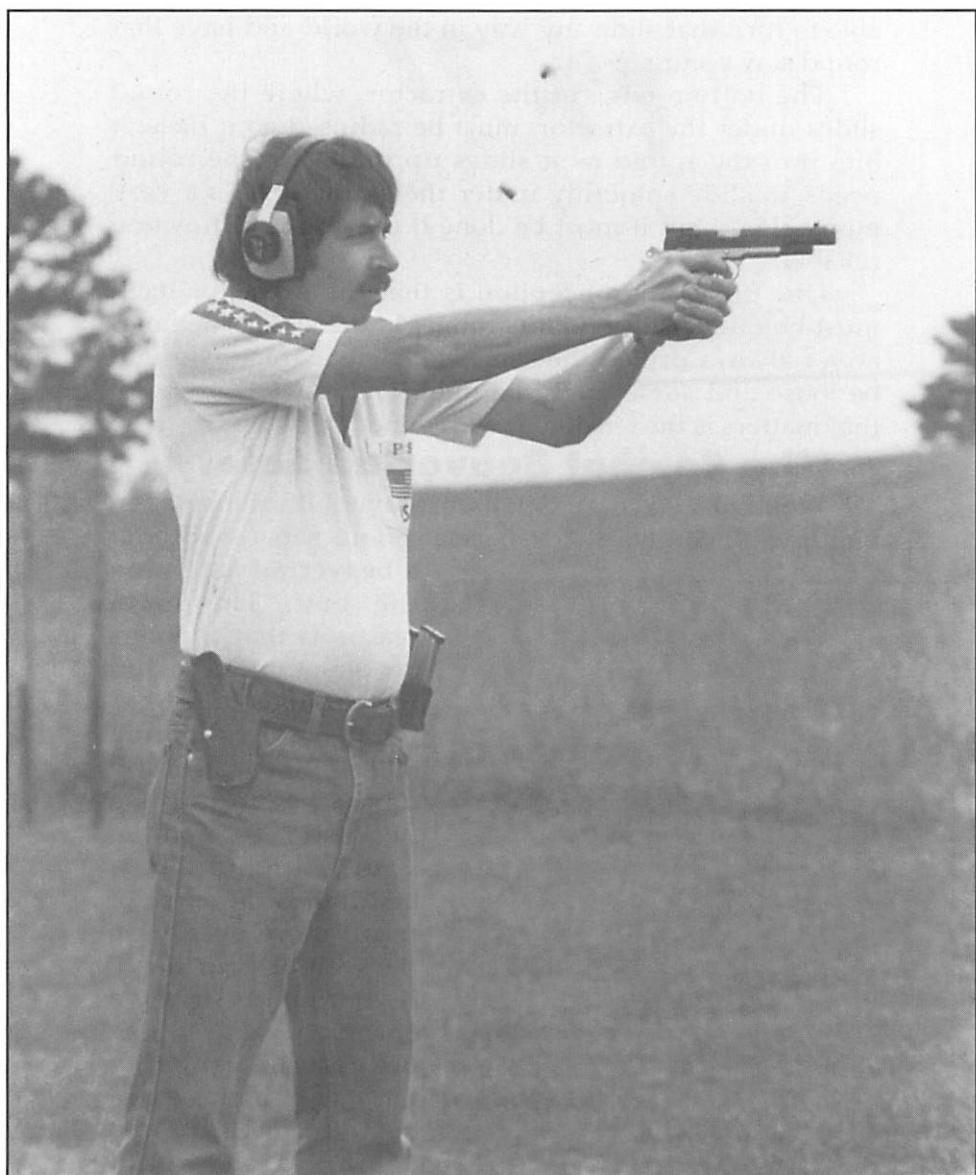


Note the polished "claw" on the extractor. It's been recontoured and sharpened to assure a strong, positive extraction of the fired case from the chamber. This is necessary on every out-of-the-box 1911.

essential thing to do to make a gun work reliably. Interestingly enough, it's something that many gunsmiths don't really know how to do.

Ideally, with the slide off the gun, it should take about four pounds of tension to slide a round up under the extractor. With a loaded hardball round, you should be

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There's a lot of new shooters out there and I really miss the chance to have met you and competed with you. I retired from formal competition several years ago, but in my day I guess I could hold my own pretty well. Here I am in my United States IPSC Team colors practicing for the 1983 IPSC World Shoot.

able to turn that slide any way in the world and have that round stay secure.

The bottom edge of the extractor, where the round slides under the extractor, must be radiused so it doesn't bite into the round as it slides up under it. The round needs to slide smoothly under the extractor. It's a very minor thing, but it must be done if the gun is to function reliably.

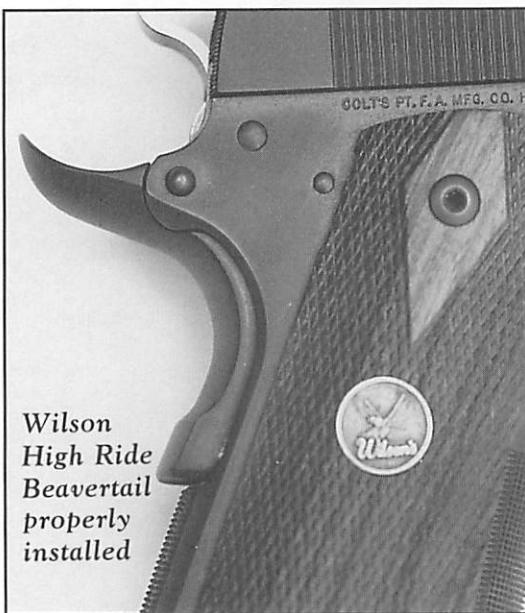
One other misconception is that the extractor itself must be under tension in its tunnel in the slide. The holes aren't always drilled the same, so some extractors might be loose and some might be tight. It doesn't matter. All that matters is the tension on the round itself.

The Combat Beavertail Safety

We'll go into more detail on beavertail safeties later, but, briefly, you hardly ever see a serious shooter without

a beavertail safety on the gun. The main reason is that shooters are shooting more and more rounds.

If you're shooting 600 or 700 rounds a day, a beavertail is a necessity to protect your hand. It distributes the force of recoil more evenly on the web of your hand. If your gun is strictly a carry gun, the beavertail probably isn't worth the extra cost to you. Then again, when would you *least* want to get bit



by hammer bite? In a gunfight!

We recommend that the beavertail be fitted by a competent gunsmith. Most of the more popular beavertail safeties require that the frame be ground for a precise fit.

Originally there was the Safari Arms beavertail and

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An extended mag release button is a real plus in competition, but a real hazard on the street.

the Wilson beavertail, but today the latest improvement to the spade-shaped grip safety is the new style of "recessed hammer" beavertails.

We offer our standard Wilson beavertail, which is available in blue and stainless, and also our Wilson hi-ride beavertail. You can also choose from Ed Brown's high hand position beavertail and a similar unit from Caspian Arms.

All serve the same function, which is to allow the hand to gain the highest possible grip on the gun by recessing the tang of the beavertail so that the hammer can fit down inside it when in the cocked position.

And if you're wondering why it's advisable to get a high grip on the gun, it's because you have better control over recoil by getting the axis of the bore as close to a straight line with your forearm bones as possible.

Your wrist, remember, is the leverage point around which the gun flips in recoil; getting the hand as high as

possible brings the bore axis closer to the pivot point.

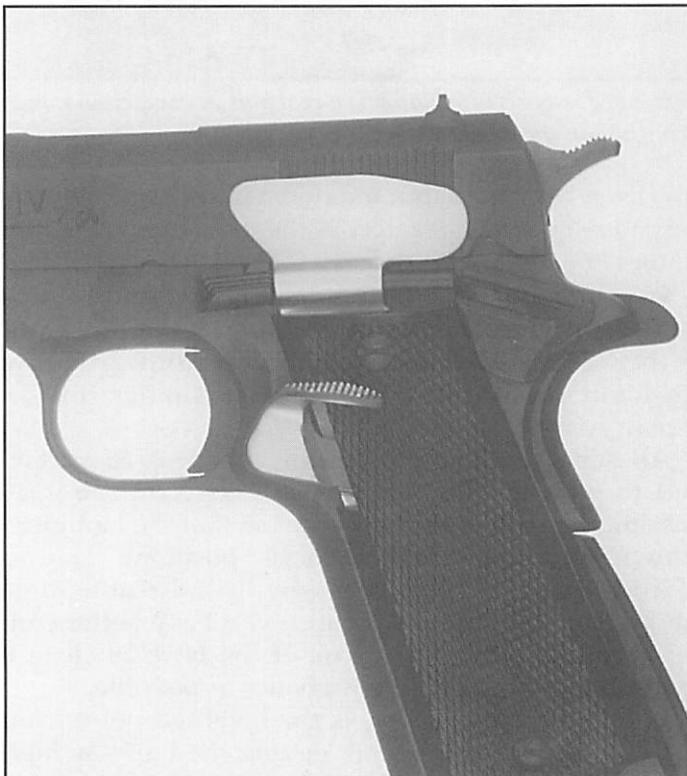
The Extended Mag Release Button

There are several ways to approach this modification. You can use a screw-on button that's larger than usual, a longer version of the stock release button can be fitted or you can go with the innovative new mag release lever system invented by Buzzy Clifton and sold through Wilson's.

Proving that nothing beats a better mousetrap, Buzzy developed a mag release button with a roller bearing on it that is actuated by pressing down on a lever that is mounted over the mag button in a set of special grips.

You don't have to twist your hand to push in the

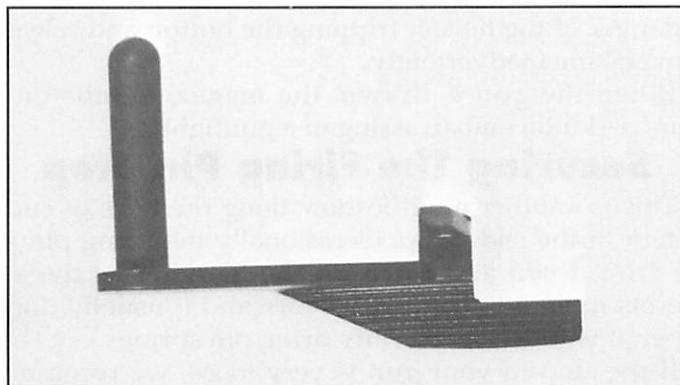
The new Wilson "First Grip" is a clever mag release button that operates by pushing down, not in, on the large, easy-to-reach button. You don't have to twist your hand to reach the "First Grip."



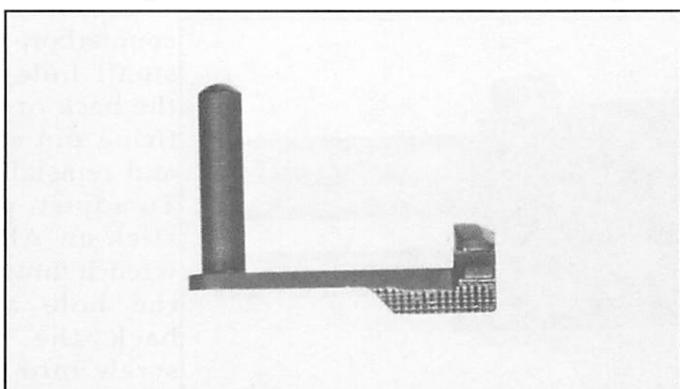
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button, you simply drop your thumb down onto the lever just like on a thumb safety and press—*viola*, instant mag change!

Of the older, conventional styles of mag releases, I prefer a good-quality screw-on button because it limits how far the extended button can go in; there's no way you can push it in too far and catch the magazine on the other side.



A Wilson extended slide release (above) is basically unnecessary. I recommend that if you want a fancy slide release that you have a standard one checkered (below).



This is a problem with the longer version of the stock button. The button goes in too far, so it releases the magazine on the one side, but actually is pushed through so far that it catches it on the other side. In a match, when the pressure is on, you're going to push that button hard. Better to have a stop and prevent the problem before it

occurs.

There are several good ones on the market—pistolsmith Richard Heinie offers an attractive mag button, Bill Laughridge at the Cylinder & Slide shop has a good one and we at Wilson's also offer our excellent Wilson Combat speed mag release button.

This item is strictly for competitors. For a duty/carry gun, I do not recommend them at all, mainly because of the danger of the holster tripping the button and releasing the magazine inadvertently.

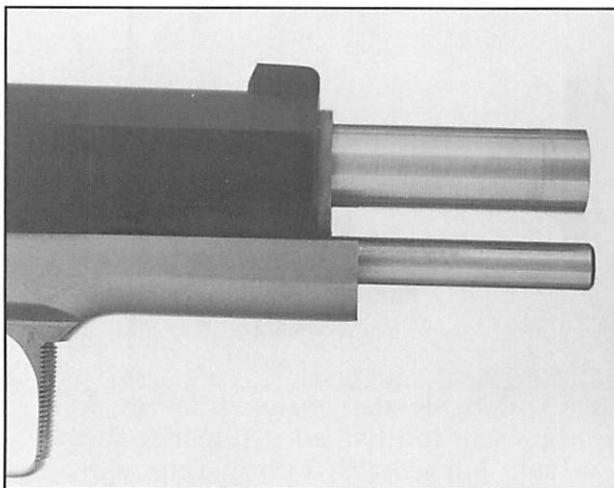
When the gun is drawn, the magazine falls on the ground— kinda embarrassing in a gunfight.

Securing The Firing Pin Stop

This is another modification along the lines of cutting a detent in the slide stop. Occasionally the firing pin stop will drop down and catch on the hammer as the slide attempts to go into battery. It's rare and it usually doesn't happen if you use heavy-duty firing pin springs.

If the stop in your gun is very loose, we recommend securing it with a set screw. We drill a hole through the slide stop down into the slide. Then we take the firing pin stop off and tap the hole in the slide for a set screw.

Then we counterbore the small hole on the back of the firing pin stop and reinstall it. To adjust, you stick an Allen wrench through the hole and back the set screw into the counterbore in the firing pin stop until it blocks most of



Virtually all top competitors use a full-length recoil spring guide rod because it helps to make the gun cycle the same way each shot.

the firing pin stop movement.

THE COMBAT AUTOMATIC

A word of caution: Don't secure the stop against all movement—it must have a little movement. That way, everything operates normally and the firing pin stop stays secure.



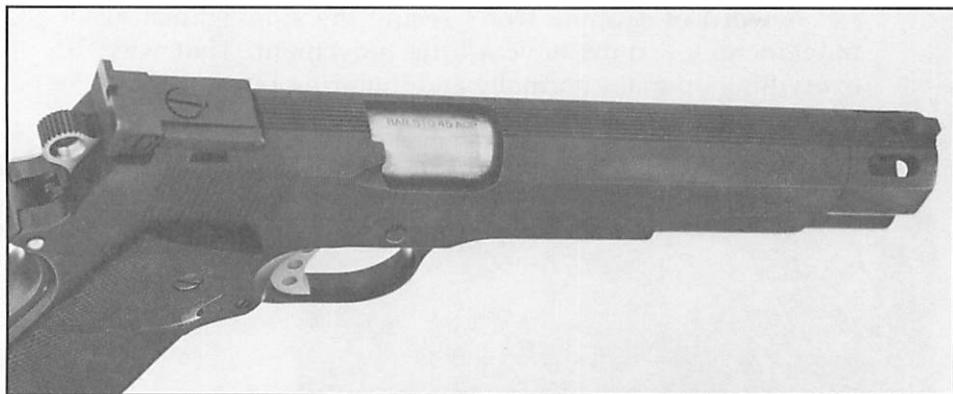
Southwest Pistol League champion Jim Zubiena became somewhat of a cult hero to IPSC shooters when he starred as a hitman on the TV show "Miami Vice." Jim's incredibly realistic use of weapons and, especially, one memorable fast draw scene from the surrender position were all made possible by the skills he learned in matches.

If you're intent on heading off every possible malfunction, you might want to have this done. It's not a very popular item, but we started doing it because it kept happening to one of my guns.

Serrating The Top Of The Slide

We serrate the top of the slide with deep grooves. It's said to be done to reduce glare on the slide, but let's not kid ourselves. That's like saying adding a racing stripe to a car makes it go a few miles per hour faster. Serrating the slide is strictly for appearance.

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I think it adds a distinctive touch that's quite attractive, but it has no practical use whatsoever. We cut the grooves with a mill and detail-finish them by hand with a checkering file. Some pistolsmiths use a milling machine for the entire job. Both ways are expensive since



Richard Heinie builds an immaculate combat pistol. You can be sure that he recommends his customers to use magazines with his own bright pink bumper pads!. Today you can get bumper pads from Heinie, C.P. Bullets and others in fluorescent colors.

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the set-up is very time-consuming.

Extended Slide Release

An extended slide release is the second "most worthless" thing you can add to a gun. The first "most worthless" is an ambidextrous extended slide release! If you operate the Government Model correctly, you don't need an extended slide release.

Only people with super long thumbs can operate an extended slide release without changing their grip, and no one has a big enough hand to hold the trigger back and operate an extended slide release the way it's supposed to be done. What possible use could the thing be? They usually do nothing but cause problems.

The best on the market are made by Pachmayr and Wilson's, but sometimes the magazine follower will pop up over one, and you can't get the magazine out. The bigger and heavier ones will pop up from sheer inertia and engage while there's still ammo in the gun.

You'll definitely never see one on a top competitor's gun and that just about says it all.

When you see what equipment the top ten or so shooters are using, and none of their guns has this modification, you must reason that it can't be very necessary.

Top competitors are going to buy every possible equipment advantage. They're going to get every little thing to give them the edge. If they don't use it, it can't be an edge.

We try to talk our customers out of buying extended slide releases. If you want a fancy slide release, buy a checkered standard one.

Installing A Full-Length Recoil Spring Guide Rod

This is an item that enhances reliability on the gun, and in most cases it improves accuracy as well. With a full-length recoil spring guide, every time the gun cycles, the spring coils straight in and straight out. It doesn't snake around in the frame.

A spring guide makes the recoil springs last longer and work more efficiently, in addition to ensuring that the



Once considered quite fashionable, red insert front sights like on this Pachmayr double-action conversion of a Combat Special. Today red inserts are passe—you hardly see them at all any more.

gun works the same way each time.

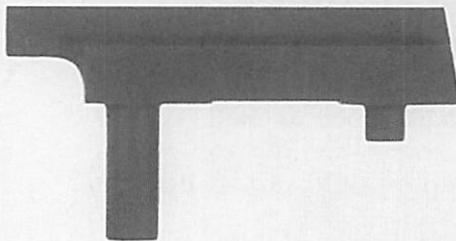
There are two disadvantages. One is that you can't "press check" the slide to see if the gun is loaded, which you shouldn't be doing anyway. The second is that it makes it hard to cycle the slide if one hand is disabled.

Without the spring guide, you can push the slide against a table, or, for people who don't care much about

their toes, against a shoe. With the guide in place, about the only way to cycle the slide with one hand disabled is pushing against the rear sight, which isn't good for the rear sight.

I did shoot one oddball match years and years ago where we had to chamber a round one-handed. No well designed match would ever

Wilson extended combat ejector.



THE COMBAT AUTOMATIC

incorporate something that would be so potentially dangerous.

This isn't a necessary modification, but it is a helpful one. Most of the parts drop right in without any modification at all. Most of the units on the market are countersunk in the front, so the disassembly process doesn't even change, which is probably the best way to go.

There have been some exotic guide rods tried, like tungsten steel to add recoil-absorbing weight. That's all fine and well except that tungsten is a bear to machine and the trouble to make one, what with the frequent cutter breakage, renders the part prohibitively expensive. Besides, you gain only a precious few ounces anyway, and a lot of top shooters like 1990 Steel Challenge winner Jethro Dionisio and 1990 IPSC national champion Jerry Barnhart say that the gun should be as light as possible!

In fact, now the trend for heavier guns is reversing to the point where we're seeing guide rods made from lightweight Delrin, a high-strength plastic!

Stick with tried and true stainless steel for your guide



Like red inserts, finger grooves are also out of vogue these days.

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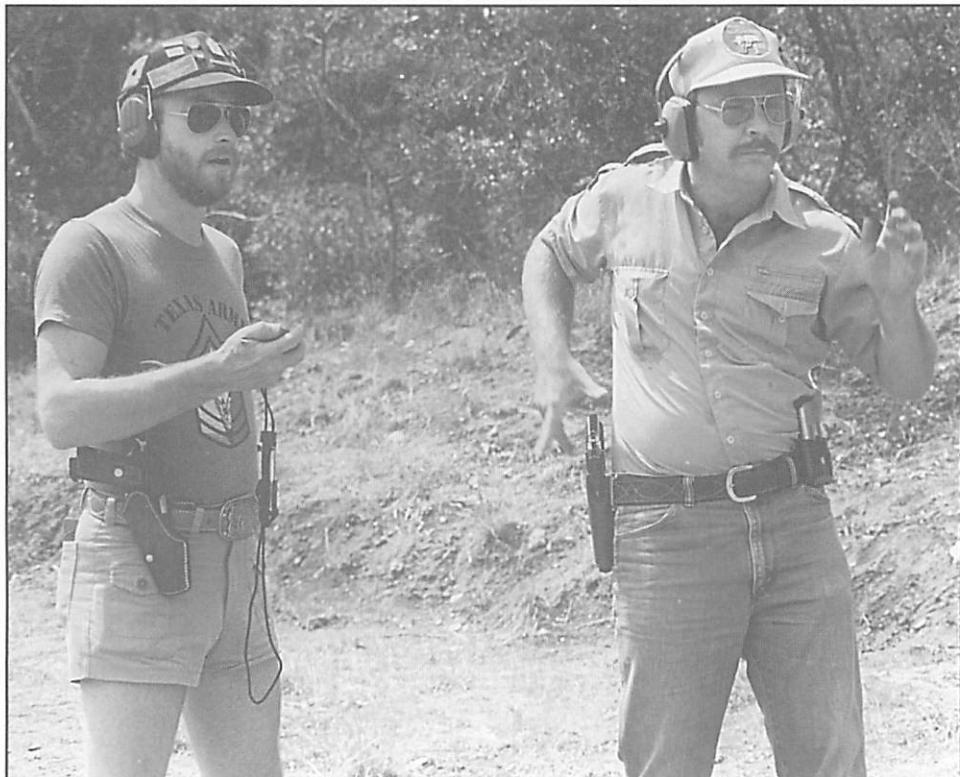
rod. I hate to keep plugging my own parts, but the simple fact is that Wilson's make the best guide rod on the market in terms of quality of construction and durability of life.

Magazine Base Pads

Every magazine should have a magazine base pad on it. They're not there to protect the magazine when it falls to the ground—a common misconception. They're there to guarantee the magazine fully seats when you place it in the gun.

That little extra length is necessary, especially with today's super-big mag funnels. They're also necessary to keep the magazine from pinching your hand during speed

At the risk of dating him, here is the editor of American Handgunner (left) running his friend Russell Jung through a "draw and fire" drill with a stopwatch to keep time. This was taken in 1981 in Waco, Texas—before the PACT or Pro-Shot timers were invented!



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reloading.

A magazine without a pad, especially going into a gun without a funneled well, will fiercely pinch your hand, which is guaranteed to slow the next reload down. I suggest base pads on all magazines, whether for competition or duty.

How much extra room do they take up, after all? And if you really need to reload quickly, you're going to need it a lot worse in a shootout than in a match.

There are basically two types of base pads: large and small. Well, if you want to count the Hot Pink and Purple



While lacking some of the sex appeal of a Racegun, this basic pistol from Wilson's is capable of fine combat accuracy.

Passion and Day Glo Yellow, I guess there are three—large, small and brightly colored.

By small I mean something the size of our standard pad on our new Wilson/Rogers Series 47 match magazines. That's about .350" of pad extending below the bottom of the frame. By large I mean like on our oversize pad on our Series 47 magazines, about .675". Pick a pad that best suits the size of mag funnel you have, large for

something like the La Rocca funnel built on a mainspring housing and small for a standard bevel job or the Rogers E-Z Loader.

Red Inserts For The Front Sight

We've pretty well covered this elsewhere, but it's probably worth mentioning again. Red inserts are one of those things that people think they must have. (The same goes for white outline rear sights or the three dot system.)

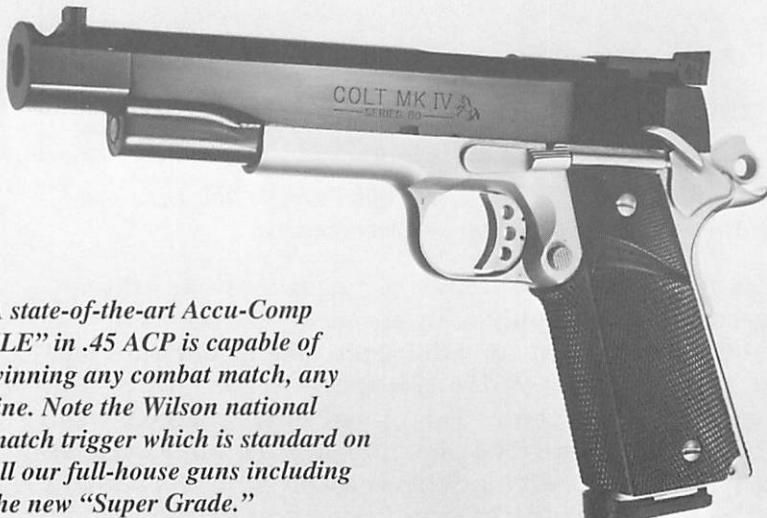
Red inserts only have real utility for people with poor eyesight or for shooters who are going to use the gun strictly in low-light, close-range conditions where no precision accuracy will be required. I don't recommend them for a competition gun.

Extended Combat Ejectors

This is a modification that is necessary on the heavy-barrelled Colts where the longer barrel retards ejection somewhat, and it's also a good idea on a standard gun.

An extended ejector throws the brass about twice as far and does away with the danger of a smokestack jam, unless, of course, you're shooting a load totally underpowered for your spring set-up.

The extended ejector is a modification that was



A state-of-the-art Accu-Comp "LE" in .45 ACP is capable of winning any combat match, any time. Note the Wilson national match trigger which is standard on all our full-house guns including the new "Super Grade."

THE COMBAT AUTOMATIC

popularized by Ross Seyfried, who was one of the first combat shooters to pick up on extended ejectors. It helps the reliability, and that alone makes it useful.

Most of the new generation guns that are out— the Stars, the Astras, the Smith & Wesson autos— routinely use long ejectors.

A Lightweight Commander also comes with an extended ejector, but that ejector is not interchangeable with a Government Model or a Gold Cup. The slide has to be milled out to provide clearance for it, which is the reason we started making our own ejectors that require no modification to the gun for installation.

The only disadvantage to an extended ejector is that in many guns, it won't readily permit the ejection of a live round. The round is too long to clear the ejection port, which requires you to cycle the action slowly, sometimes even letting the round drop out through the magazine well.

If you have an extended ejector on a .38 Super or 9mm, never wrack the slide vigorously to eject a live round to prevent the highly unlikely event of the ejector impacting the primer. It's one of those things that absolutely could never happen... until it does.

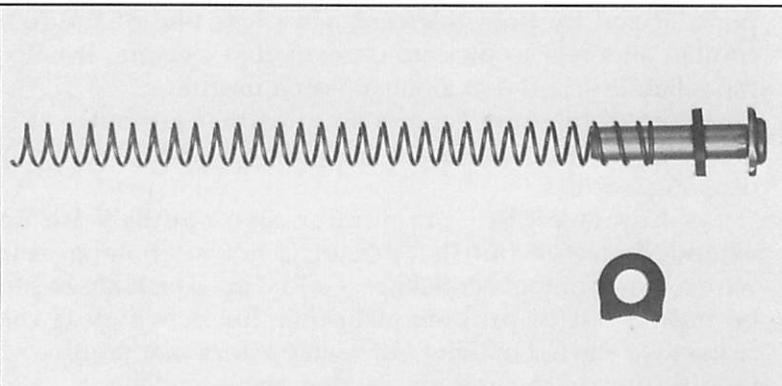
Finger Grooves On The Front Strap

Some gunsmiths offer this modification, and some of the old Safari Arms aftermarket frames came with grooves. The rationale is that the grooves help you to position your hand in the same place each time. And they do look pretty sexy on a gun.

As a general rule, I think finger grooves are more of a disadvantage than an advantage. When you grip the pistol, you need to slide your hand up from behind onto the gun. With finger grooves, the hand has to go up and over the grooves.

Finger grooves offer two other disadvantages. The first is that they are usually built-up through welding, which can't do the gun any good. Frequently, with that amount of welding, the magazine well collapses and must be expanded back out or filed until the magazines go in and out smoothly.

The second objection is price— it's a very expensive



The one and only, the original Wilson/Rogers SHOK-BUFF. Beware of cheap imitations!

option, and not worth the money, in my opinion.

Accurizing The Combat Pistol

A basic combat accuracy job is a good start for a beginning competition pistol and it is a fundamental improvement for the defensive gun. Our definition of a combat accuracy job is a gun that will shoot four to five inches at 50 yards. That's combat accuracy.

Most of the combat accuracy jobs that people do entail a little bit of slide tightening, some type of improvement on the rear lockup of the barrel—long links, a Dwyer Group Gripper kit or welding up the lugs. Invariably a solid target bushing is fitted in the front.

And then there are the "musts" of a combat accuracy job—barrel throating, lowering the ejection port, and a trigger job.

With a competition accuracy job, you're talking about three to three-and-a-half inch groups at 50 yards with total reliability. Everyone knows a .45 can be made to shoot two inches at 50 yards, but it usually can't be made to shoot that way and work every time! So we have to compromise a little bit on our match grade accuracy job to ensure that reliability for IPSC shooting.

Here we fit the slide precisely to the frame, leaving just enough play to guarantee the reliability. With almost any match grade accuracy job, we go to a custom barrel, usually our Wilson stainless match barrel or a Bar-Sto by

THE COMBAT AUTOMATIC

request, if available, which we will fit properly in the slide stop area and mate to a match bushing.

Then we include the Combat Accuracy job. The main difference is the match barrel, and when you get that match barrel properly fitted, you get the kind of accuracy you want.

Most of the leading pistolsmiths offer a very similar combat and match grade accuracy job. Accuracy jobs basically are dependent on the quality of the fitting. However, keep in mind that guns— like cars— are individuals, and some are better than others. Therefore, some guns will accurize better than others.

National Match Triggers

There are five major National Match triggers on the market today: aluminum alloy, stainless steel, carbon steel, titanium and Delrin (a plastic). We recommend the aluminum alloy, which is light enough to give a good trigger pull and is less expensive than a carbonfiber or titanium trigger.

The lighter the trigger itself (within reason), the better of a safe trigger pull you can get because of less trigger bounce you'll get to trip the sear. Accordingly, we manufacture our own aluminum trigger, which we skeletonize by drilling three holes.

This Wilson Combat trigger is light enough to give you the best possible trigger pull. The ultra-light titanium triggers are unnecessarily light— really just tits on a boar.

You can already get a super-light, super-reliable trigger pull with an aluminum alloy trigger, so why pay twice or three time the price just to get a titanium whistle?

There are also long and short match triggers. Most people prefer the long trigger. In fact, 99% of our customers prefer the long trigger.

Naturally, Colt supplies the short trigger with the gun. I think this goes back to the military origins of the Model Of 1911 when John Browning allowed for the time when soldiers might be wearing thick winter gloves.

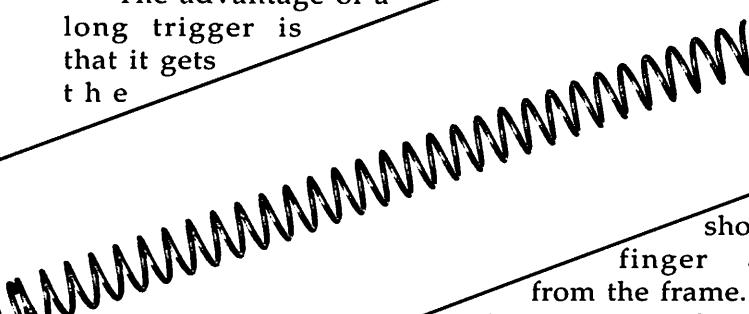


You hardly see a plunger type recoil buffer any more, although they're still available from several manufacturers.

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The only reason a shooter would need a short trigger is if that shooter has very small hands or extremely short fingers. Or if you shoot the Eskimo Invitational IPSC Classic with fur lined mittens on!

The advantage of a long trigger is that it gets the



shooter's finger away from the frame. With a short trigger, the index finger can drag on the side of the frame, making it harder to control the trigger.

SHOK-BUFF™ Kits

This is a collaboration between holstermaker Bill Rogers and myself, but the original idea came from gunsmith Armand Swenson. He cut out nylon bushings and slipped them on the recoil spring guide to stop the battering of the slide on the frame.

Bill Rogers and I mentioned that we'd like to do some more research on the project, and Armand said, "Go ahead, laddy, I don't have the time. Have at it." So we came up with the SHOK-BUFF™ buffers, which are injection molded out of a high-strength nylon polymer that resists being destroyed by the constant slamming.

The SHOK-BUFF™ sandwiches in between the two contact areas to prevent the slide from battering the frame. It rides on the recoil spring guide and absorbs the tremendous beating that a .45 or .38 Super undergoes.

In fact, as tough as the SHOK-BUFF™ is, it is still eventually destroyed by the battering. Better to destroy an inexpensive buffer than an expensive frame. All a shooter needs is to see a thoroughly worn SHOK-BUFF™ to be convinced that it's a good idea.

As far as we're concerned, the SHOK-BUFF™ is the

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only recoil-type buffer, shock absorber, on the market that really works without any real drawbacks. The only drawback the SHOK-BUFF™ has is that it must be

Practical shooting simulates the defensive use of a handgun. Here is Rob Leatham at the '89 Nationals "attacked" while he's "changing a flat tire." It is the use of realistic and challenging courses of fire that makes IPSC shooting the fastest growing shooting sport.



replaced, but it's inexpensive. It will definitely increase the life of your gun, which is very important when you're shooting 20-50,000 rounds a year.

Since the SHOK-BUFF™ came into wide use, we've seen a steady decrease in cracked frames. The only cracked frames we see anymore are from shooters who continually shoot very hot loads or with frames that were heat-treated a little too hard to begin with.

Other Recoil Buffers

There are several other recoil buffer systems on the market, manufactured by several different companies. The

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most popular and the one that has proven itself the longest on the market is the standard plunger-type buffer.

It has been the consensus of most gunsmiths that for one of these plungers to really protect the frame, the plunger spring has to be so stiff that the gun won't lock open when it's empty.

The major drawback is that on every cycle the front of the plunger is hitting the recoil spring plug, trying to jam it out the front of the gun and actually damaging the plug and the barrel bushing.

In extreme cases, the bushing can actually be broken. Even though they do help on one end, they're doing an equal amount of damage on the other end. The Detonics System, as supplied from the old Detonics company, comes with extremely heavy recoil springs, so heavy that there are occasionally smokestack jams even with hardball.

The guide rod itself is of too small in diameter to keep the springs from twisting around. There are also metal plates on either side of the buffer, which still leaves metal-to-metal contact. It does help some, but it's not nearly as effective as direct cushioning by a fiber buffer.

We don't recommend any of the recoil buffer systems, because we feel that a full length recoil spring guide and a SHOK-BUFF™ will work just as well without the big disadvantages. It also costs much less.

The original SHOK-BUFF™, now tried and proven for almost a decade, is the only injection molded buffer on the market. The Johnny Come Latelys are all die cut and the problem with a die cut part is that it is not as rugged as the material we can force into our expensive mold.

If you wanted to jump right into the buffer business with a minimum of cash, you'd die cut your buffers. If you wanted to make a quality part and stay for the longterm, you'd invest in an injection mold. Garbage in, garbage out... as the computer boys say.

Heavy Duty Recoil Springs

The Colt autopistol is designed so that when a round feeds out of the chamber, it is pushed forward by the breech face, and the round slides up under the extractor hook. It will work right-side-up or upside-down, with normal spring rate springs—that is, 15 to 18 pounds—

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and hardball equivalent loads.

When a heavier recoil spring is installed, the slide hits the incoming round so hard and so fast that it pops the case ahead of the extractor, so the extractor has to snap over the head of the round every time the gun works. That batters the extractor to death.

Furthermore, the gun won't work if you should have a need to fire the gun upside-down or at an odd angle. You lose the controlled round feed, which is one of the aspects of the 1911 design that makes it so reliable.

Anything that steps outside the design parameters of the gun should be avoided, which is why we don't even sell super-heavy recoil springs.

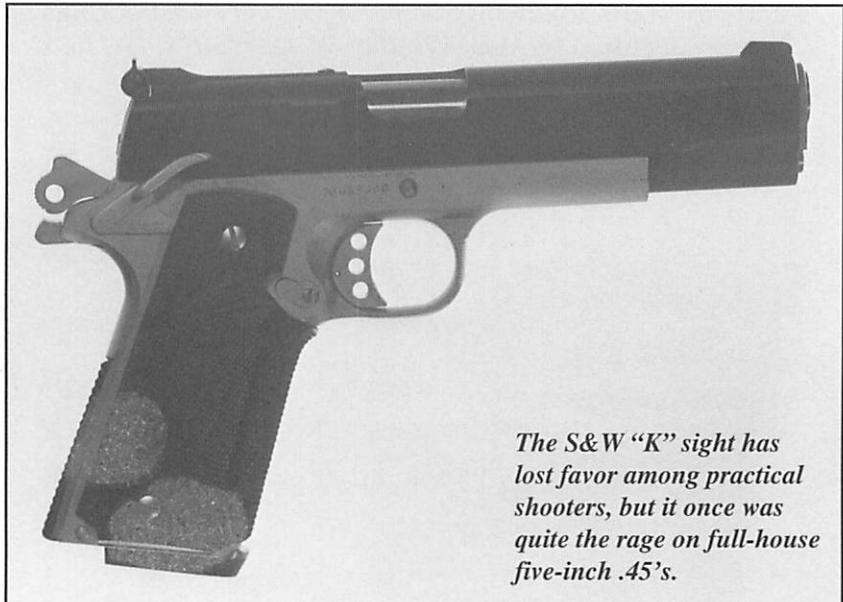
You really shouldn't go over 19 pounds for hardball, and in a Commander, you shouldn't go over 20. The stock spring in a Government Model is about 15 or 16 pounds, versus 18 in a Commander. Try to go up one step, but that's the limit. When you go to a big heavy spring, you create more problems that you could possibly cure.

In addition to the controlled-round feeding problem, trigger jobs that were perfectly safe with an 18 pound spring becomes unsafe with a 24 pound spring. It jars the gun so hard that a hammer, which should never follow, suddenly starts following. Some of the very best springs are manufactured by Walt Wolff of W. C. Wolff Co.—he's constantly striving to improve his products.

The Full-House Five-Inch

If the modifications on a basic combat gun are dictated by necessity, the changes on a full-blown five-inch—as Government Models are generically called—are limited only by the shooter's needs and imagination.

There are really two levels of top combat modifications. The first is the full-house combat gun that retains the standard Government Model configuration, barrel and slide length. This



The S&W "K" sight has lost favor among practical shooters, but it once was quite the rage on full-house five-inch .45's.

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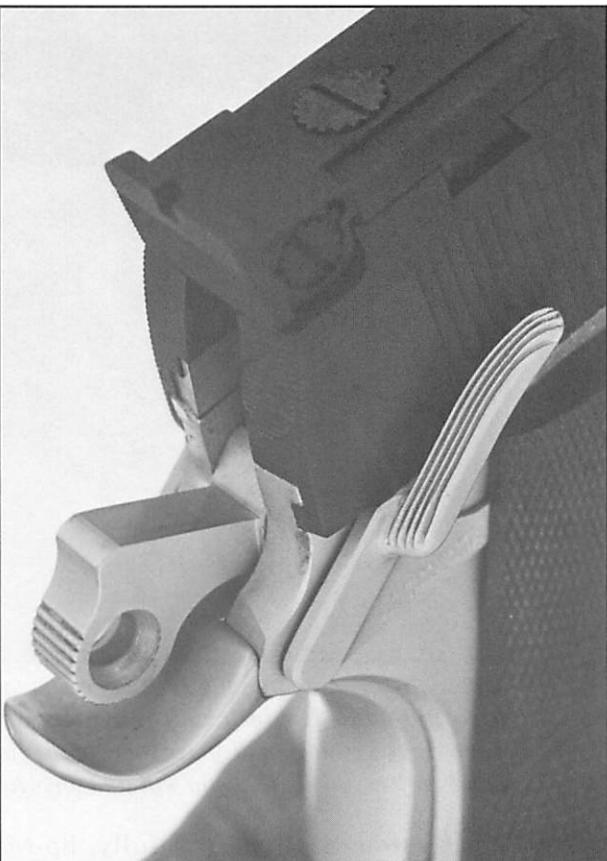
is called the "Tactical Class Pistol" for the stock gun division in IPSC competition. The rule prohibits any sort of muzzle brake or compensator.

The second variation includes that wonderful gamut of Anything Goes that we fondly call the exotic guns. Here you enter the world of skeletonized slides, multi-chamber compensators, and all manner of marvelous gadgets, bells and whistles. This genre of custom guns is dealt with in the next chapter, *Raceguns*.

As pistolsmiths, we see the greatest amount of money spent (and sometimes wasted) on "full-house five-inch" combat modifications.

That is where we typically get shooters who have read about something in a magazine or are simply looking for a custom gun and say, in essence, "Gimme the works."

In addition to all the basic modifications, "the works" includes:



It's too bad everything isn't as simple in life as picking a good set of sights—there's really only one, Bo-Mar. Rugged and reliable, the Bo-Mar sight is so superior to everything else out there that it's actually a problem. It's sometimes hard for Bob and Mary Walker (bo-mar, get it?) to keep up with demand.



When Mike Plaxco won the 1982 US Nationals, this was his prize. It's a full-house five-inch built by master pistolsmith Dick Heinie. Then as now, this gun displays some of the finest metalwork and hand craftsmanship that you will find anywhere at any price.

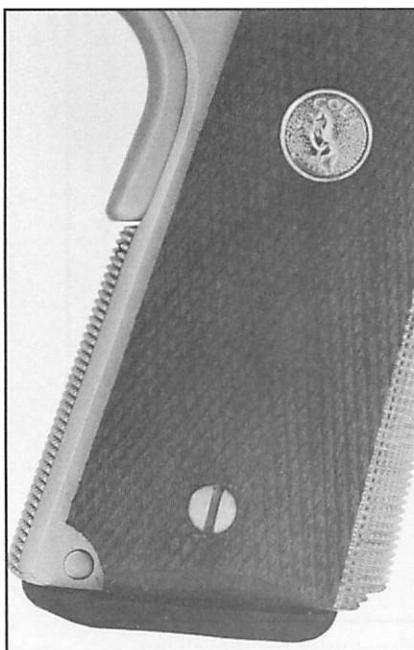
Custom Sights: Truthfully, Bo-Mars are the runaway favorites for serious shooters.

Ambidextrous Combat Safety: There aren't that many weak hand stages that might require an ambidextrous safety, but this is, after all, "the works."

An ambi safety is not really essential, but it is part of a full-house package. Note also the installation of a Commander-style hammer. Today there are a number of different after-market hammers like the Commander.



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A checkered front strap and mainspring housing are functional additions to both a carry gun and a "Tactical Class" competition gun. A lot of today's checkering is still handcut, although some custom gunsmiths are using machine-cut checkering. We still hand checker at Wilson's.

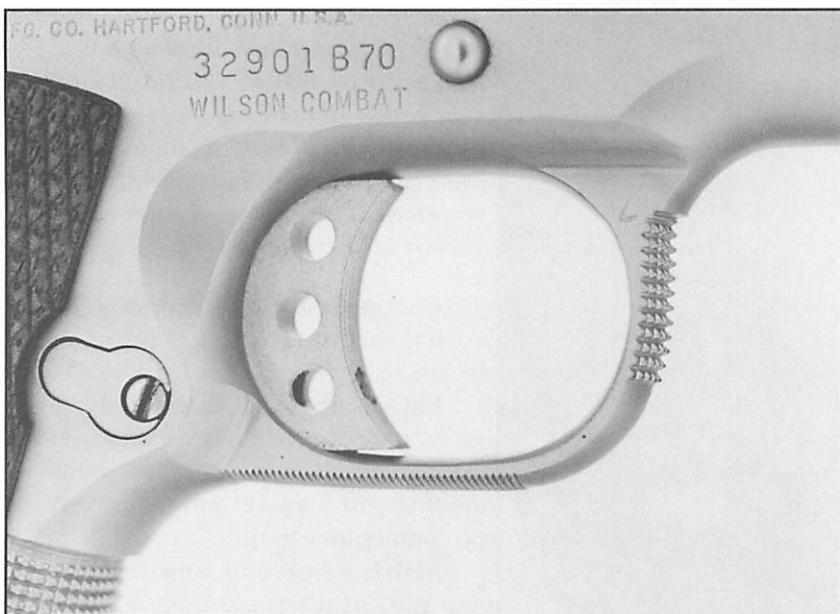
Commander Style Hammer: As we discussed earlier, this is primarily a cosmetic change.

Fitted Beavertail Grip Safety: A very useful, almost necessary accessory on a competition gun—and one that you'll see on virtually every top competitor's gun.

Match Barrel and Bushing: The very guts of a top accuracy job and absolutely necessary for the serious

Debby James displays the sort of intense concentration that has won her three US national titles and two IPSC world titles. Her gun of choice is a Wilson Accu-Comp in .38 Super made by Colt.





Serrating the front of the trigger guard is functional for those who use a "finger forward" grip. However, serrating under the trigger guard with good, clean 40 lpi checkering is beneficial to every shooter. It keeps the weak-hand firmly gripped around the pistol.

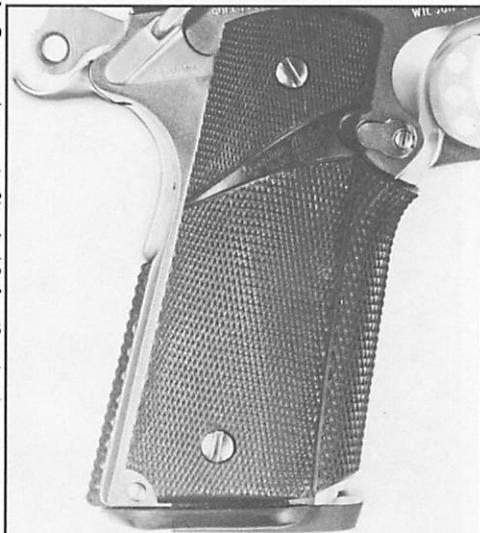
competitor.

Rear of Slide Serrated:

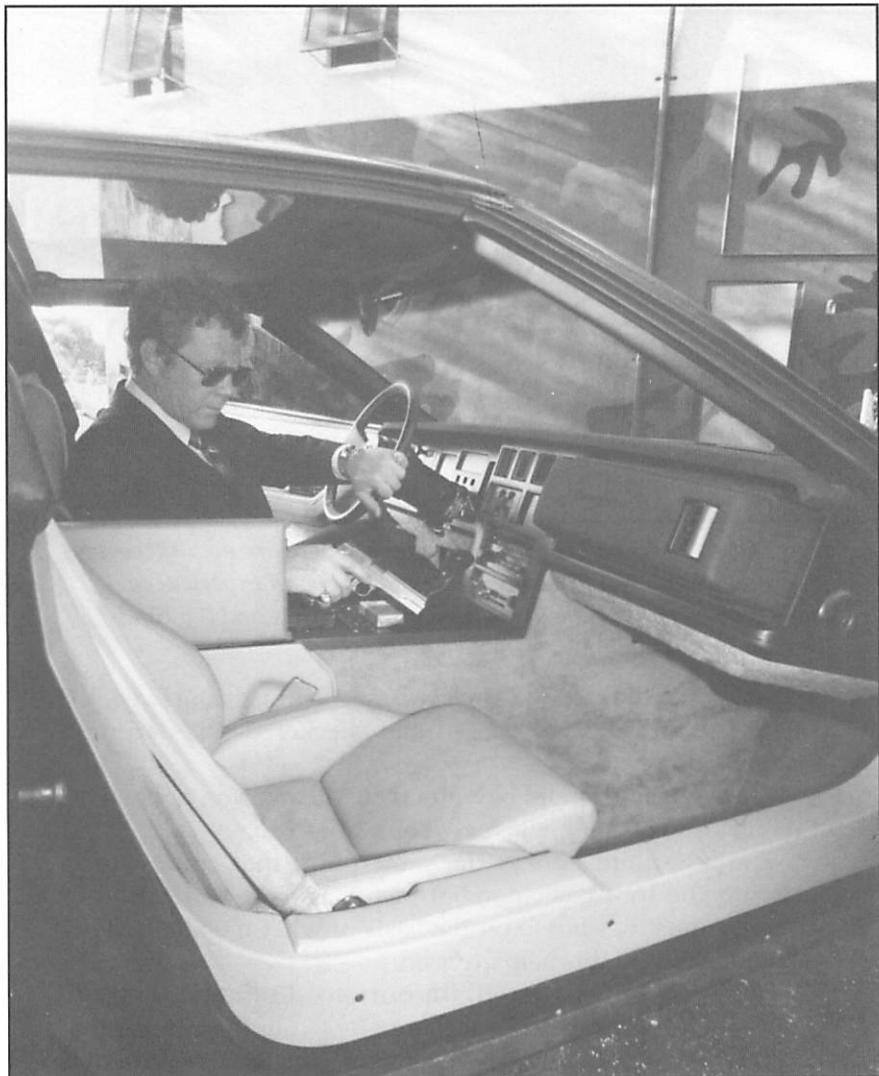
Again, primarily cosmetic, to match the rear of the sight.

Hard Chrome Plating: A competition "Tactical Class" gun is going to get handled a lot more than an average weapon, and because of that, we heartily recommend plating at least the frame with either hard chrome or electroless nickel. We discuss plating in more detail in the chapter on *Combat Finishes*.

Pachmayr grips achieve the same results as checkering, but are significantly cheaper.



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A Colt five-inch .45 is the best self-defense handgun there is. This businessman uses his .45 auto for protection, but the same gun, if setup right, can win any IPSC "Tactical Class" match.

Advanced Modifications

From that point, all sorts of bells and whistles are available. Checkering or stippling can be substituted for Pachmayr grips and mainspring housing; the entire gun can be plated; an E-Z

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Kings Gun Works builds a clean five-inch. There are no unnecessary frills on this gun, yet it speaks of attention from an experienced combat pistolsmith. Note the extended speed safety and the King-Tappan combat sights.

Loader can be fitted to the already funnelled magazine well; the trigger guard could be squared and checkered—it's a pretty long list, actually.

The net result should be a gun that will take you to the IPSC Nationals and beyond, wherever you want to go.

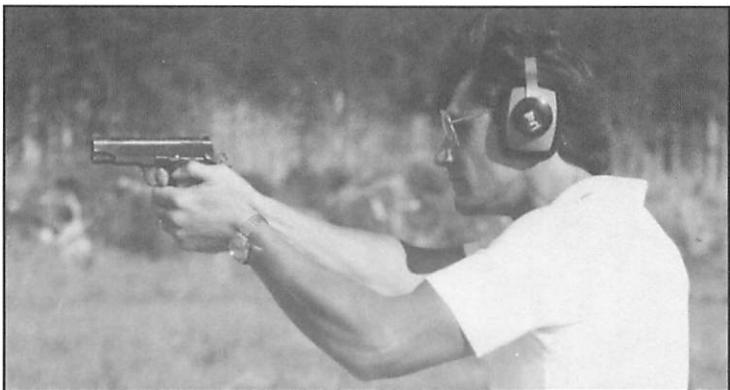
The key point here is the same point that comes up in choosing the first basic combat pistol. Each modification or accessory must be chosen on the basis of what it actually does. Ask yourself: Will this help my score?

Be aware of the compromises to the gun and the potential problems each new change in the gun represents.

Granted, on our No. 130 Master Grade Combat Pistol there are a couple of items that are primarily cosmetic, but they represent a very small part of what is actually done to the pistol. The vast majority of the modifications are for the same four groupings—reliability, gun handling, sight picture and accuracy.

Once you get to the "wish list," be especially careful in evaluating all the additional accessories and modifications. If, after shooting competitively for a while, you feel that finger grooves on the gun's frame will

THE COMBAT AUTOMATIC

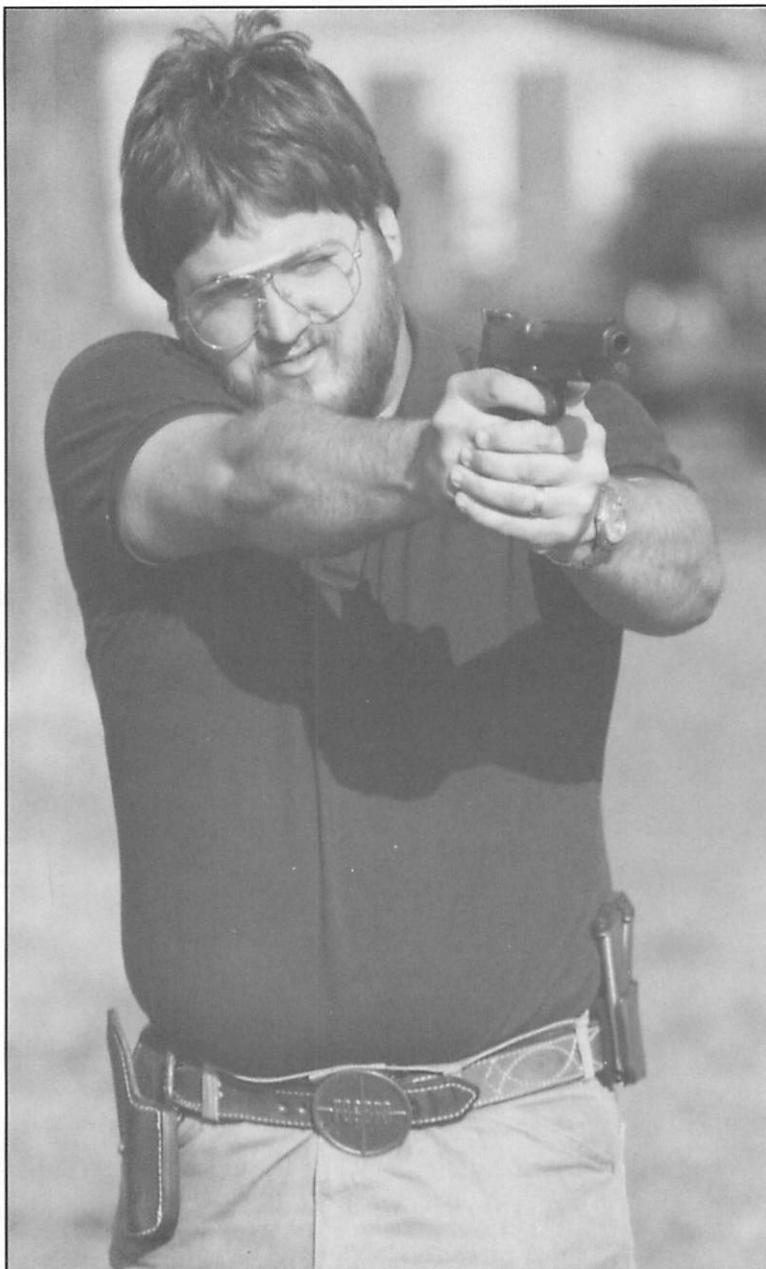


Like any sport, it takes dedicated practice to master the handgun.

Jim Hoag offers a basic reliability and tuning package that is all the basic Colt really needs as you get it out of the box.

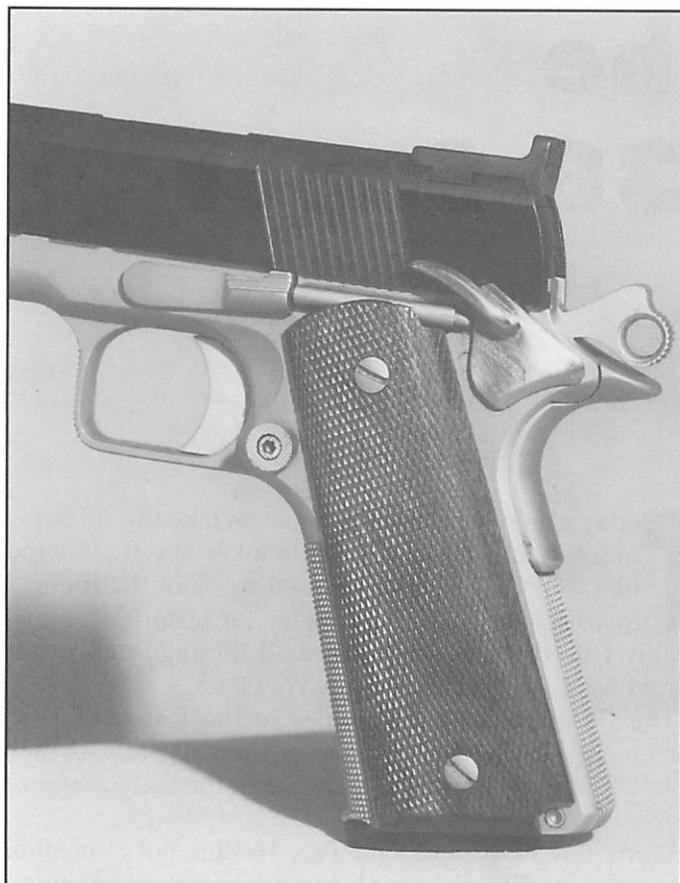


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Whether it's in a match or on the street, a good five-inch 1911 is hard to beat. The .45 ACP is still the favorite caliber of many.

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Here is a really tasteful full-house five-inch. Note the Heinie rear sight, custom made beavertail, Commander hammer, squared and checkered trigger guard and checkered front strap.

substantially help your score, then by all means arrange to have the gun so equipped. But be aware of the compromises to the gun and the potential problems each new change in the gun represents.

As we said before, there are no perfect machines, and there are no perfect solutions to problems. IPSC was founded on the concepts of accuracy, speed and power, and the more involved in IPSC-style shooting you become, the more you come to realize how those three things balance out.

It's the same with modifying a gun for combat. You need to find the balance point, and that point varies with each shooter.

The .38 Super

Today's new generation of shooters take the .38 Super for granted and make cute little jokes about .45 shooters like, "Hey, do you really want to shoot that thing... the Smithsonian pays good money for historical relics!" It's certainly true that the .38 Super is all the rage today, but it's really a fine old cartridge that goes Way Back.

The .38 Super was introduced in the Twenties as a law enforcement cartridge in the days of the gangsters as the Colt "Super .38" and its purpose was to defeat the body armor of the time.

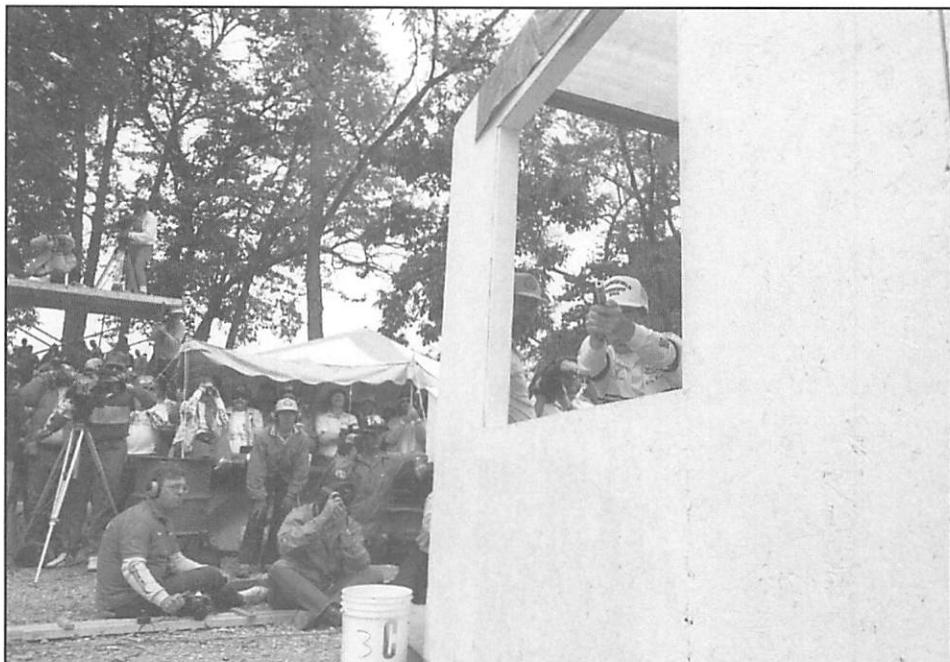
Pretty Boy Floyd and Baby Face Nelson, not to mention Al Capone and Bonnie and Clyde, had taken to wearing primitive (by today's standards) bullet proof vests and the police wanted something better than their feeble .38 Specials. (The .357 Magnum hadn't been invented yet.)

They also rather liked the idea of an auto pistol to provide them with more firepower against the heavily armed criminals. So it was that the .38 Super was offered in the Colt pistol, Model of 1911-A1, and its factory load consisting of a 130 grain full metal jacketed bullet at 1,150 fps was capable of penetratting the bullet "proof" vests of Dillinger and Crew.

The .38 Super remained a modestly popular cartridge in modern times, and even Mr. Forty-Five Himself, Jeff Cooper, advocated the .38 Super as an ideal trail gun.

The colonel experimented in the early '70s with a round he called the Super Nine which was a .223 rifle case cut down to

THE COMBAT AUTOMATIC



Jerry Barnhart was one of the last Big Name shooters to switch from .45 to .38 Super, but after Jerry won the 1988 US Nationals with a Steve Nastoff custom .45, he saw the writing on the wall. Ever since he has been competing with a Wilson "Super Grade" .38 Super.

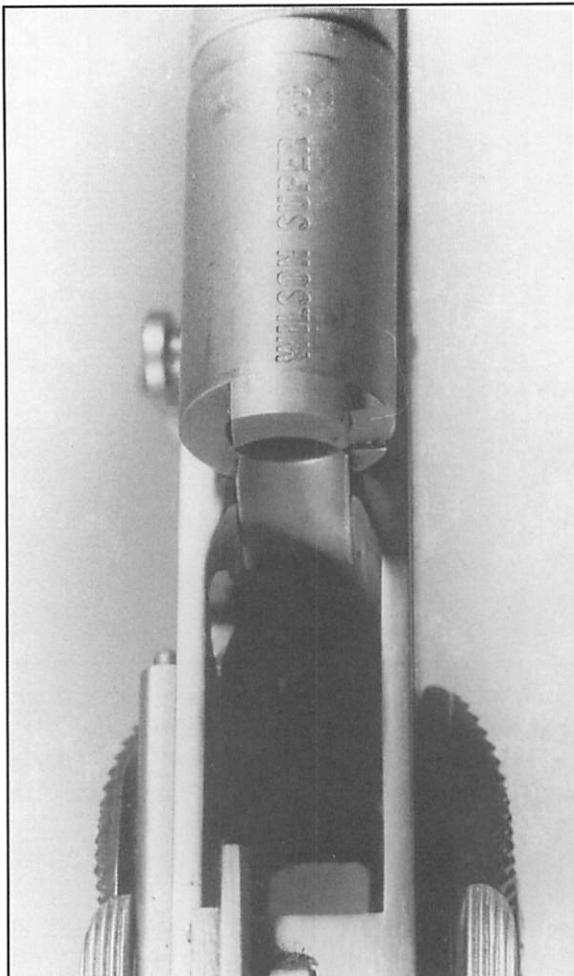
cycle in the 1911 pistol and it fired a 130 grain bullet at a pretty impressive 1,400 fps.

Today Jeff Cooper pooh-pooh's the use of the .38 Super in practical pistol competition because it's not a proven manstopper like the venerable .45 ACP, but the fact remains that the colonel himself was dabbling with "major" .38 Super loads and never even knew it.

The first successful use of the .38 Super in IPSC was... Chip McCormick and the Devel Gammon pistol.

I know, I know, you thought I was going to say... Rob Leatham and a Wilson Accu-Comp. No, contrary to popular myth, it was not Rob Leatham who first used a .38 Super in IPSC matches, although he most certainly was the first to win a Nationals with a Super and he definitely did more to popularize the cartridge than anyone else.

In 1984, Rob won the US Nationals in Phoenix with a .38



A Wilson .38 Super barrel has a "fully supported chamber" which means that the case head is enclosed back to the extractor groove. To accomplish this, the barrel incorporates an integral feedramp. The frame is milled away and the barrel's feedramp fits into the frame as the picture shows.

Charlie Petty photo

Super shooting 158 grain bullets over a charge of Blue Dot powder. Those who attended the match knew even at the time that they had just witnessed a phenomenal turning point in IPSC history—the day of the .38 Super had dawned.

However, at the time that the first Supers surfaced with their advantages of greater magazine capacity (nine versus seven for a .45; 10 versus eight with extra-capacity magazines), dramatically less recoil than a .45 and far less shot-to-shot recovery time, we were still dancing on the ragged edge of the Unknown.

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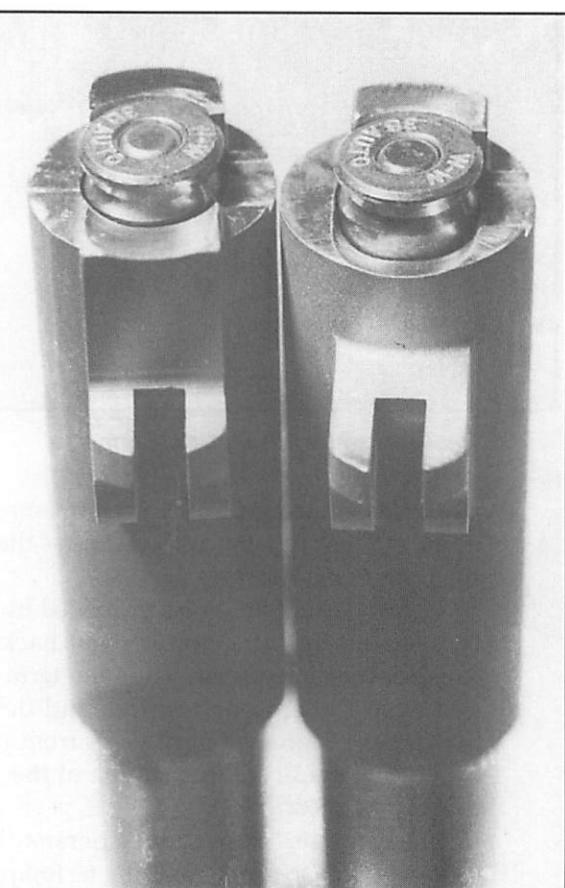
"Super Face" And Early Testing

Pressure testing had never been done on the loads which had been worked-up pretty much by seat of the pants reloading procedures. Load 'em up, shoot 'em and eyeball the cases for pressure signs.

We were using standard barrels without the so-called "fully supported chambers" that are commonplace today. Most of our research was with Blue Dot powder, and we quickly discovered that our barrels lacked an adequate margin of safety as we stumbled onto another distressing realization—Blue Dot powder was subject to dangerous lot-to-lot fluctuations in burning rate.

Every now and then a many-time-fired case would let go at the back, just in front of the extractor groove where the case is hanging unsupported in the barrel due to the chamber's throat being relieved in that portion.

Here at the proverbial weak link in the chain, the brass case would rupture spewing hot powder gases down into the



An "unsupported" .38 Super barrel (right) and a "supported" barrel show the difference in the amount of the case that sticks out—the actual unsupported part of the case that gives the barrel-style its name.

Just in front of the extractor groove is where a case can erupt for "Super face."

Charlie Petty photo



Jim Garthwaite full-house .38 Super

magazine chute and back through the receiver until it found the point of least resistance to escape—the slot in the slide where the frame's ejector rides.

Tiny particles of brass propelled by the escaping gas would be sent through the ejector's slot back into the shooter's face causing very small cuts. Thus the term "Super face" was born, and even though our research and development with the .38 Super has progressed light years from those early days of blind experimentation, still the stigma of the .38 Super haunts us like Macbeth's ghost.

Dreams of "Super face" persist, but they're unfounded today if you use proper loading techniques.

The Modern .38 Super

Throughout this period of development, which ran from roughly 1984 until 1986, I was at the forefront of the research. I contacted Dave Trowbridge of Winchester and arranged for the very first laboratory pressure testing of "major" .38 Super loads.

We were all on pins and needles for several weeks to find out if our loads fell within the recommended loading limits of

THE COMBAT AUTOMATIC

the Sporting Arms and Ammunition Manufacturers Institute (SAAMI), but finally Dave's report came back positive—loaded with Winchester's WW540 powder and using lead bullets weighing 158-160 grains sized .356", we safely made the power factor. I designed a new 155 grain semi-wadcutter bullet (Saeco #930) as a result of this research.

Along about 1988 or 1989, our continuing experimentation revealed that a newly developed jacketed bullet, a 150 grain FMJ from John Ricco of CP Elite Bullets, was capable of making major with the proper powder charges, new +P Winchester brass and very careful loading procedures.

About the same time we also discovered the virtues of Accurate Arms No. 7 powder and, together with the new CP jacketed 150 grainers, we had found the perfect recipe for .38 Super.

Despite the attractiveness of the CP 150's—which really do shoot exceptionally well—some shooters couldn't leave well enough alone and they began experimenting with 125 and 130 grain jacketed bullets. To date there is no safe load for these bullets and we at Wilson's will not warrantee our guns for these "pocket rocket" loads.

We strongly recommend against any .38 Super bullets less than 150 grains in weight—and only then with a fully supported match-grade barrel. Let me just say that once more for effect:

WARNING: serious injury could result from shooting handloaded .38 Super loads with bullets weighing less than 150 grains. Don't do it!

(And please don't even talk to me about handloading the 9mm Luger up to "major" levels. If you like to play basketball on the Interstate, go right ahead and shoot 9mm Major.)

Compensators And The Super

Meanwhile, the guns were progressing as rapidly as the cartridge was. With the .38 Super's greater powder column and increased gas pressure over the .45 ACP, the compensators really began to sit up and sing.

We happily discovered that the Super's pressures were

Meanwhile, the guns were progressing as rapidly as the cartridge was. With the .38 Super's greater powder column and increased gas pressure, the compensators really began to sit up and sing.

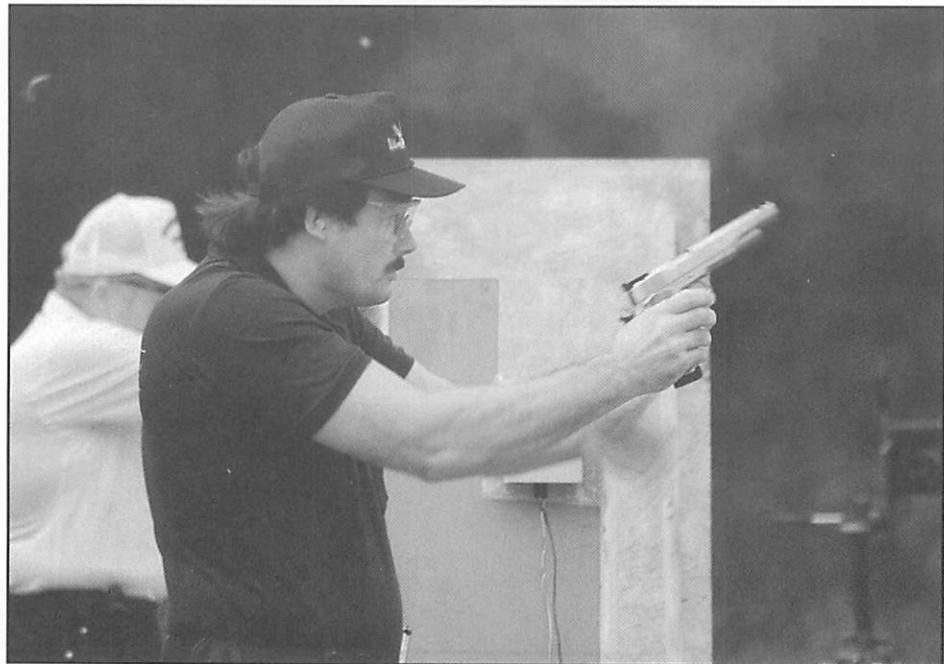
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such that our Accu-Comp design was even more effective than we had realized with the .45 ACP.

At the same time, we saw that those pressures needed containment and so Wilson's developed a barrel with an integral feedramp that served to enclose more of the cartridge's web area.

It is necessary to mill away a part of the frame to fit a "fully supported" barrel, but a skilled pistolsmith can tackle this chore easily. Today all of the top barrel makers offer integral feedramps on their .38 Super barrels.

Competition And The Super

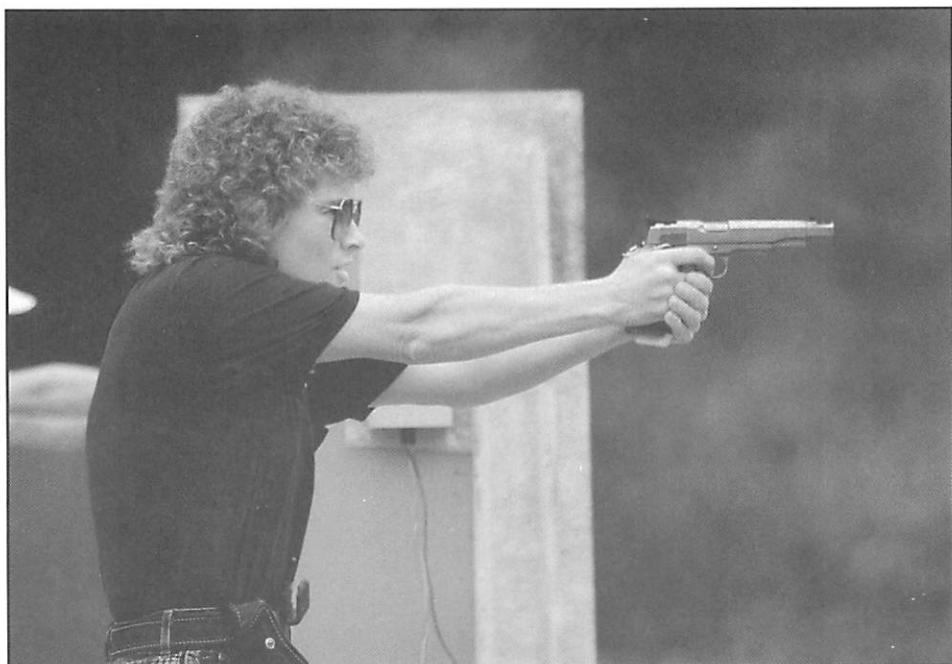


Mark Mazotta is one of the leading Bianchi Cup shooters, but he's also a contender in IPSC shooting. He fires a Wilson gun.

When we speak of .38 Super combat pistols, we're primarily talking about competition guns because most people who carry a Government Model for self-defense do so in caliber Four-Five.

I'm not saying that a swarm of 130 grain Silvertip hollowpoints wouldn't be effective as a manstopper, I'm simply making the observation that virtually all the .38 Super combat

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Debby James of Team Colt shoots a Wilson Super Grade exclusively.

pistols being built today are for competition purposes, not self-defense.

Actually, there's no rule that says you must compete with a Super. You can do what you like with a .38 Super pistol— my good friend Larry Bullock took his Wilson Super Grade pistol to South Africa for a hunting safari and he very nearly took a shot at a Greater Kudu with his .38 Super!

I have no doubt that he would have killed the big antelope cleanly with a well-placed shot. Those G-Men of the Roaring Twenties knew what they were about when they began using the Colt Super .38 against the gangsters.

So the next time some "martial artist" tells you that your .38 Super "game gun" isn't "practical," you can mention that the .38 Super was originally designed as a manstopper!

But it's nonetheless true that most Supers are used for competition and it is along those lines that I'll direct my comments.

It's not necessarily just IPSC competition, either, as Bill and Christie Rogers have competed very successfully in the

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Bill Rogers was at the forefront of .38 Super development just as he has been on the cutting edge of holster advancement. Bill's new Final Option holster from Safariland is the winningest rig in competition today.

revolver-dominated Bianchi Cup match with their modular .38 Supers incorporating ProPoint sights on their custom George Huening pistols.

Jerry Barnhart shot his Colt .38 Super modified extensively by Wilson's Gun Shop in the Bianchi Cup. Ross Carter, one of the finest Bianchi Cup marksmen ever to play the game, has long been a autopistol shooter in the wheelgun-crazed match and he to uses a .38 Super.

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The next time someone tells you that the .38 Super isn't very accurate, remind him that Ross shot 165 X's in the 1989 Bianchi Cup, more of the tie-breaking center-zone hits than even the match winner! With his .38 Super Accu-Comp!

As far as IPSC guns go, there really isn't much difference between a .38 Super competition pistol and a .45, other than the size of the hole in the end.

Unlike the Supers modified for the Bianchi Cup, which are rare and exotic birds, the Supers customized for IPSC have all of the standard combat features that we've already discussed in previous chapters.

The only real difference is the fully supported barrel which necessitates the machining away of a portion of the frame. Some gunsmiths offer full supported .45 barrels so that the same frame can be used as a switch-caliber pistol with a .38 Super top end. Yes, they're that identical.

Reloading components, once quite scarce and expensive, are now nearly as common as .45 components, although maybe not quite as cheap.

That wonderful thing called once-fired GI brass isn't available for the Super, but you can still pick up quantities of Super brass for a reasonable price through bulk buying. Midway Arms, Winchester, PMC and Remington all make good quality Super brass.

The Raceguns

Before touching on the growth of the whole new generation of sophisticated guns—including our own Accu-Comp and Super Grade Accu-Comp—in traditional and non-traditional calibers like .45, .38 Super, 10mm, .40 S&W and even some wildcats like 9mm Major and .356 TSW, I'd like to address some of the criticisms leveled at the so-called "gadget gun."

Long slides, bowling pin-type guns and compensated guns have all come under fire recently as being somehow in violation of the spirit of IPSC-style practical competition. The criticism has been that such guns are no better than the finely tuned bullseye guns or the super-specialized revolvers used in police PPC shooting.

Nothing, I believe, could be farther from the truth.

One of the basic tenets of IPSC shooting, as laid down by Jeff Cooper, is that practical shooting presents a problem, and the shooter is free to solve that problem in whatever way he or she sees fit. One of the most common problems presented is rapid shots against multiple targets, usually at close range.

In a situation like that, a device that reduces felt recoil and allows the shooter to quickly come back on target gives that shooter an advantage. That is exactly what the "gadget gun" is designed to do.

What is a "gadget gun?"

There are three loose categories, each one spilling over into the other. The first of the extremely modified .45s was the long

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When you pull out all the stops and order a fully tricked-out Racegun, the only limits are the size of your wallet and the imagination of your pistolsmith! Some of the more refined examples of the pistolsmith's art include (top to bottom) a skeletonized Jack Weigand "steel gun" with a Tasco "big dot" scope, an Ed Brown Mini-Comp in .40 S&W, a Nastoff Super Comp II in .45, a Wilson Super Grade in .38 Super and a Wilson Accu-Comp Commander in .45.

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slide models as perfected by Jim Hoag. No longer popular on the IPSC circuit, the long slide was once a hot set-up. A long slide is, basically, what its name implies, a standard .45 automatic with an inch or two of additional slide (and appropriately longer barrel) grafted on.

The big advantages were increased weight, which held down recoil, and a long sight radius, which aided in precision shooting.



Jim Hoag developed the longslide conversion of a Colt .45 into a thing of, well, beauty. The hallmark of Hoag workmanship is flawless attention to detail—the metalwork on that humongous slide is perfect in every way! Unfortunately, these longslides didn't shoot nearly as good as they looked.

The long slide was originally a bullseye creature, but Jim Hoag saw the utility in using one for combat competition. The long slide damped recoil, and the muzzle-heavy feel made getting the second shot off that much easier.

The basic drawback of the long slide, however, was the long slide itself. The momentum of the slide itself contributed to recoil. Shooters reasoned that if they could have the recoil

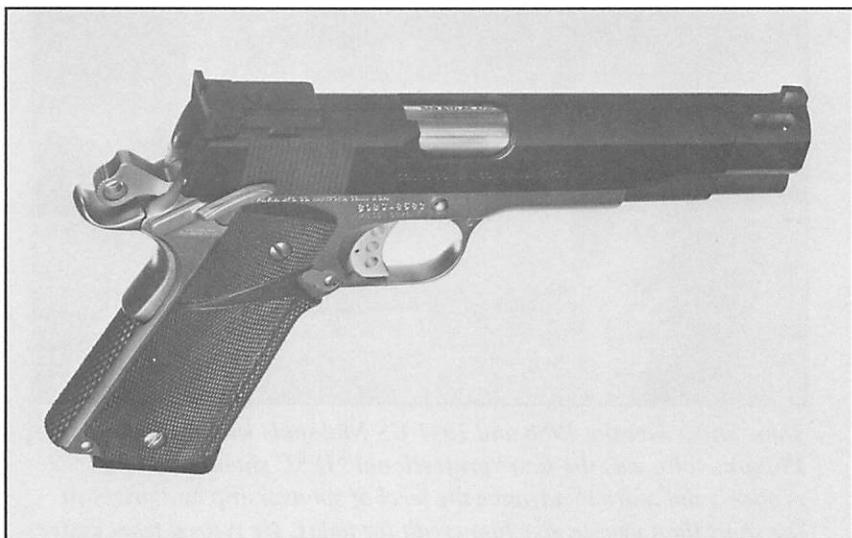
THE COMBAT AUTOMATIC

reduction and sight radius of the long slide without the added recoil of the heavy slide itself, they'd have the best of both worlds.

Early Pin Guns

Gunsmith John Williams on the West Coast had been experimenting with a compensator-like barrel weight system on the .45 for some time, but with only limited success.

Jim Clark picked up the project and produced his Bowling Pin Model designed to knock down bowling pins at a rapid clip. The Clark Pin Gun features a six-inch barrel with a weight



The Accu-Comp "C" system on a Combat Commander results in a gun that is only slightly longer than a standard Government Model. This was our first really successful racegun.

attached to the end. The barrel is fitted directly to the slide, eliminating the bushing.

We went a step beyond just a weight out on the end, and our early Accu-Comp "C" was an effective porting system that reduced muzzle jump and felt recoil.

Clark Pin Guns and our own Accu-Comp "C" models were runaway hits on the combat circuit. They have all the advantages of a long slide without the disadvantages, and they are still capable of winning any match.



John Shaw won the 1980 and 1981 US Nationals with a Clark Pin Gun. John was the first "professional" IPSC shooter and he probably did more to advance the level of sponsorship and prizes in the sport than people give him credit for today. He retired from active competition several years ago.

Much of the credit for the popularity of the Pin Gun goes to John Shaw of Memphis, Tennessee. Shaw used a Clark Pin Gun to win the 1980 and 1981 IPSC Nationals, changing forever the concept of a "combat" gun. In the 1980 Nationals, John shot the only compensated gun there. Now they dominate the sport.

Expansion Chamber Development

The third development in the history of the compensator was the rise of the expansion chamber compensator, initially popularized in this country by J. Michael Plaxco.

The Plaxco compensator concept was a way around the complexity of an Accu-Comp or a Pin Gun. In many ways, an

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Accu-Comp or a Pin Gun is a redesigned Colt, with different bushing systems and recoil spring systems in addition to the obvious modifications.

The Plaxco comp, however, was an add-on accessory to a stock gun, replacing the barrel but maintaining the standard bushing set-up.

While J. Michael dropped out of the pistolsmithing business to shoot full-time for Team Smith & Wesson, his breed of screw-on comp still exists in the many "drop-in kits" offered. We offer our DP-K in both single and double port version and there are other drop-in's like the Heinie, Brown, BAT and Centaur systems.

The Compensator Principle

In all three systems, recoil is damped in three ways: overall weight of the gun, barrel weight, and (except for the primitive Clark Pin Gun) ports cut in the barrel. Although I might be

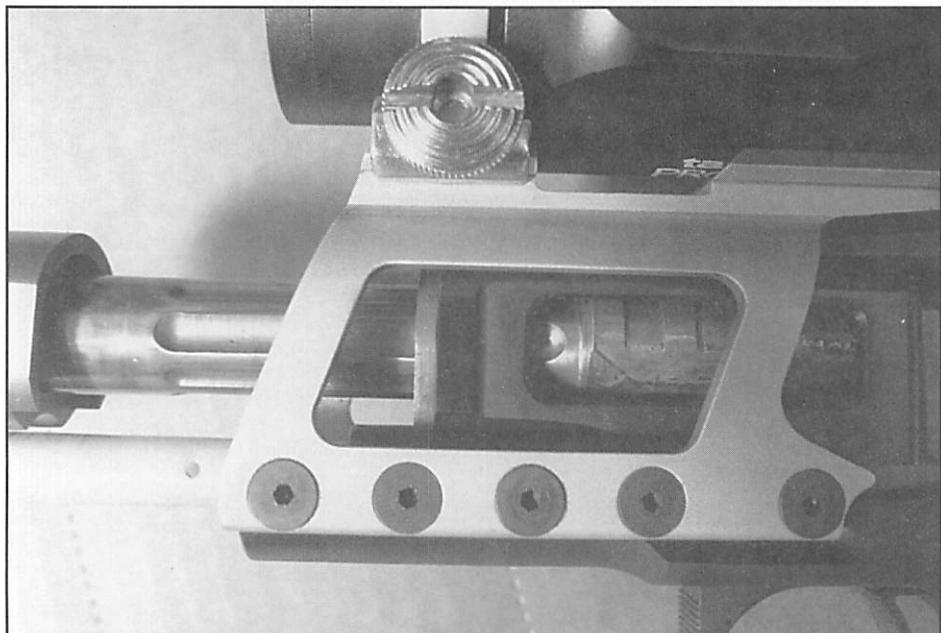


This latest variation of the competition-proven ACCU-COMP™ design was developed in conjunction with champion shooter Jerry "Burner" Barnhart. Jerry tested several variations for us until we came up with the "Dot Tracker". The "Dot Tracker" is designed to eliminate side-to-side movement during recoil so the dot simply goes up slightly. This makes recovery quick and predictable, thus reducing split times dramatically. In addition, the new "Dot Tracker" does not smoke up the front lens of your Pro-Point.

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accused of being biased, I feel the new double-chamber Accu-Comp Super Grade represents the gun with the best balance of all three elements.

The Accu-Comp system consists of a heavy barrel shroud fitted to a match barrel and to the slide, a full-length guide rod, a special recoil spring plug, an extended combat ejector, a barrel-mounted front sight and a specially designed Accu-Comp recoil spring.



A skeletonized "steel gun" made for the Steel Challenge shows just how the pistolsmithing profession has progressed. This Jack Weigand .38 Super features a fluted barrel to further reduce weight and a thoroughly swiss-cheesed slide! The Weigand scope mount is made of aluminum. Note the thinned down scope rings, another weight-saving trick. The recoil spring guide rod is made of featherweight Delrin. The titanium-comped gun weighs only 40 ozs.!

We began actual development of the Accu-Comp in the spring of 1980, but it was almost a year later before we arrived at the final direction. In the original gun, the weight was attached to the guide rod; the barrel wasn't connected to the weight at all. We settled on a system with the weight attached to

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Pachmayr Gun Works has built some exotic raceguns over the years like this full-house Commander and famous Signature Model.



a five-inch match grade Wilson barrel.

The barrel is threaded 40 threads-per-inch and a cone-shaped shroud is screwed onto the barrel and secured with industrial grade sleeve retainer.

The shroud itself is turned down to fit inside the slide, eliminating the need for a separate bushing.

When the shroud and slide are matched, we slab the sides of the shroud to match the contours of the slide and install a new front sight.

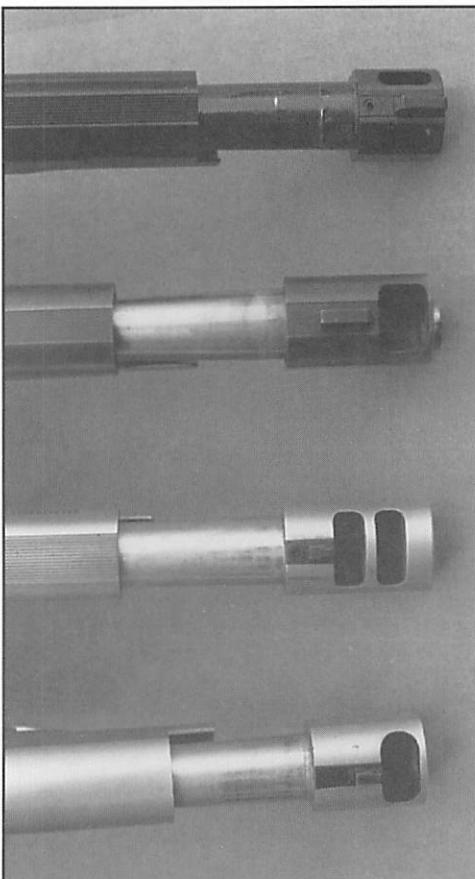
We mill and ream the portion of the slide where the recoil spring plug normally goes and fit a special recoil spring plug, then fit the *Compensators come in all shapes and sizes* two-piece guide rod. *from (top to bottom) an Ed Brown Mini-*

The guide rod Comp, Steve Nastoff Super Comp, Wilson plays an important double-chamber comp and Wilson Accu-double role in the Comp LE.

Accu-Comp. Aside

from its regular duties, it provides a resting place for the barrel when it's not in battery. This keeps the barrel from dropping too far down and putting too much pressure on the rear lock-up, pulling the barrel up off the feed ramp, a problem with some heavy barrel guns contributing to unreliability. Using this system, we have never had any reliability problems with the Accu-Comp.

When the system is installed, we mill the proper cuts for a



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A full length recoil spring guide rod serves to help support the barrel with the gun unlocked. Steve Nastoff uses a tungsten guide rod on his Super Comp II to add recoil-absorbing weight.

new double-chamber system.

The front inch of the barrel assembly is a twin expansion chamber, which we have found aids in proper ejection. When the bullet breaks out of the rifling in the barrel, all the gas can't escape at once. It's still contained in the dual port expansion chamber.

Some of the pressure is subsiding, and the gun starts to unlock, but it can't fully cycle until the bullet leaves the expansion chamber.

The dual chambers give the gun a delayed unlocking action, which seems to cut recoil somewhat as well as making the gun eject more efficiently.

Practical competition has proven that six inches is about the ideal length for a combat handgun. A seven-inch gun is just too unwieldy to get out of a holster and maneuver on close-in

Were I to go into a life-threatening situation with only a handgun, I would choose my competition Accu-Comp.

targets.

Self-Defense Racegun

Although the racegun is typically a competition gun, we get requests to build our Accu-Comp system on Commanders for use as a duty gun for police officers. The result is a gun that has a definite decrease in recoil, but is only slightly larger than a Government Model.

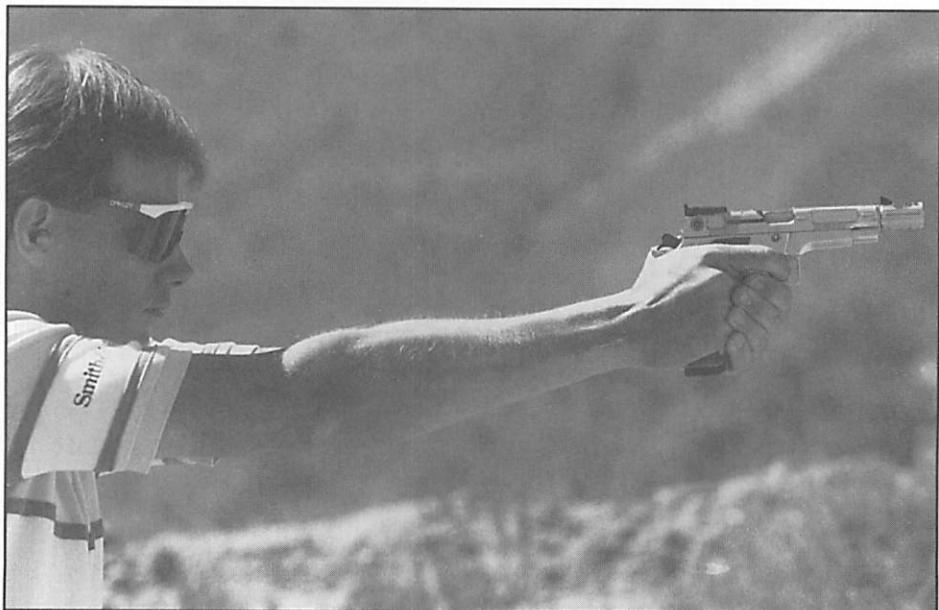
Were I to go into a life-threatening situation with only a handgun, the handgun I would choose without any reservation is my competition Accu-Comp. It has fired tens of thousands of rounds of full-charge ammo without misfiring, it is fiercely accurate, and it is as reliable as a handgun can possibly be made to be.

If this isn't practical, I don't know what it is!

The Accu-Comp "LE"

Our next version was the Accu-Comp "LE" ("Leatham/Enos"). It features one large port, three-fourth inch wide and three-eighth inch long, and a unique captured-recoil spring guide system.

Brian Enos was the "E" in Accu-Comp "LE." Now he shoots an S&W custom Model 5906 on Team S&W.



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And Rob Leatham was the "L" in the Accu-Comp "LE." He's no slouch with a shotgun either!

This gun, first in .45 caliber and then in .38 Super, has won more national championships than any other. In 1983, Rob Leatham, then a virtually unknown entity, surprised everyone when he won his first national championship with his Wilson Accu-Comp in .45 ACP. He went on to win his first of three world IPSC titles with the same style pistol.

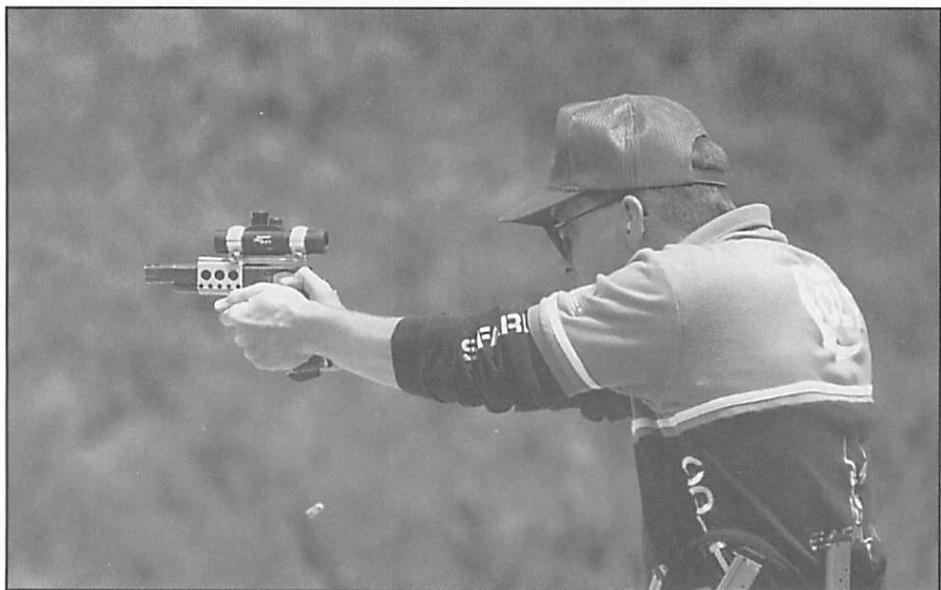
In 1984 Rob shot the IPSC nationals with an Accu-Comp in .38 Super. He won, and he won again with a .38 Super in 1985 and 1986.

He took his second world title in 1986, but he lost the nationals in 1987 to Jerry Barnhart who, at the time, was just about the only top-ranked shooter still firing a .45 ACP. The .38 Super was no longer a "craze," it was the status quo!

Rob and his trusty Accu-Comp regained the championship in 1988 and again in 1989. In '88 Rob went down to Venezuela and won his third world championship with, yup, his Wilson Accu-Comp.

In 1990 his arch rival Jerry Barnhart won the IPSC nationals with... a Wilson Accu-Comp Super Grade!

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Jerry Barnhart won the 1991 Steel Challenge with his "steel" racegun, a Wilson customized Colt Lightweight Commander in .38 Super with a Tasco Pro-Point "big dot" sight and a skeletonized slide whittled down to only 45 ozs. including the scope and mount!

Hey, at the risk of bragging I feel we at Wilson's Gun Shop have a right to be proud of the Decade of the Eighties. Our guns won three out of four world championships and six out of ten national championships!

Hey, at the risk of bragging I feel we at Wilson's Gun Shop have a right to be proud of the Decade of the Eighties. Our guns won three out of four world championships and six out of ten national championships!

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SPRINGFIELD P-9 PISTOL

9mm, 45ACP, .38 Super

Standard Model
Compact Model

Before and after view of a P-9. Given sufficient motivation, it's amazing what things can be done! The trend toward high-capacity guns like this 15-shot 9x21 is thanks to poor course design.

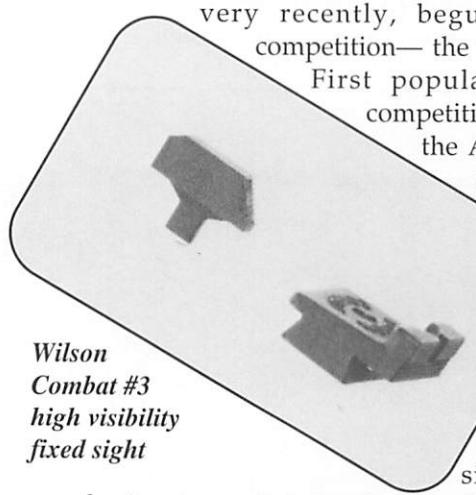


Combat Sights

There are now numerous combat sights on the market. There are several different varieties, but they break down into two basic categories, fixed and adjustable. Each has merit.

Of course there is a third category that has only now, very, very recently, begun to surface in IPSC competition—the electronic “red dot” sight.

First popularized in Bianchi Cup competition by Brian Enos in 1983, the Aimpoint sight has largely remained in the arena of the precision shooting sports (like bullseye, the Precision Event of the Masters and, of course, the Bianchi Cup).

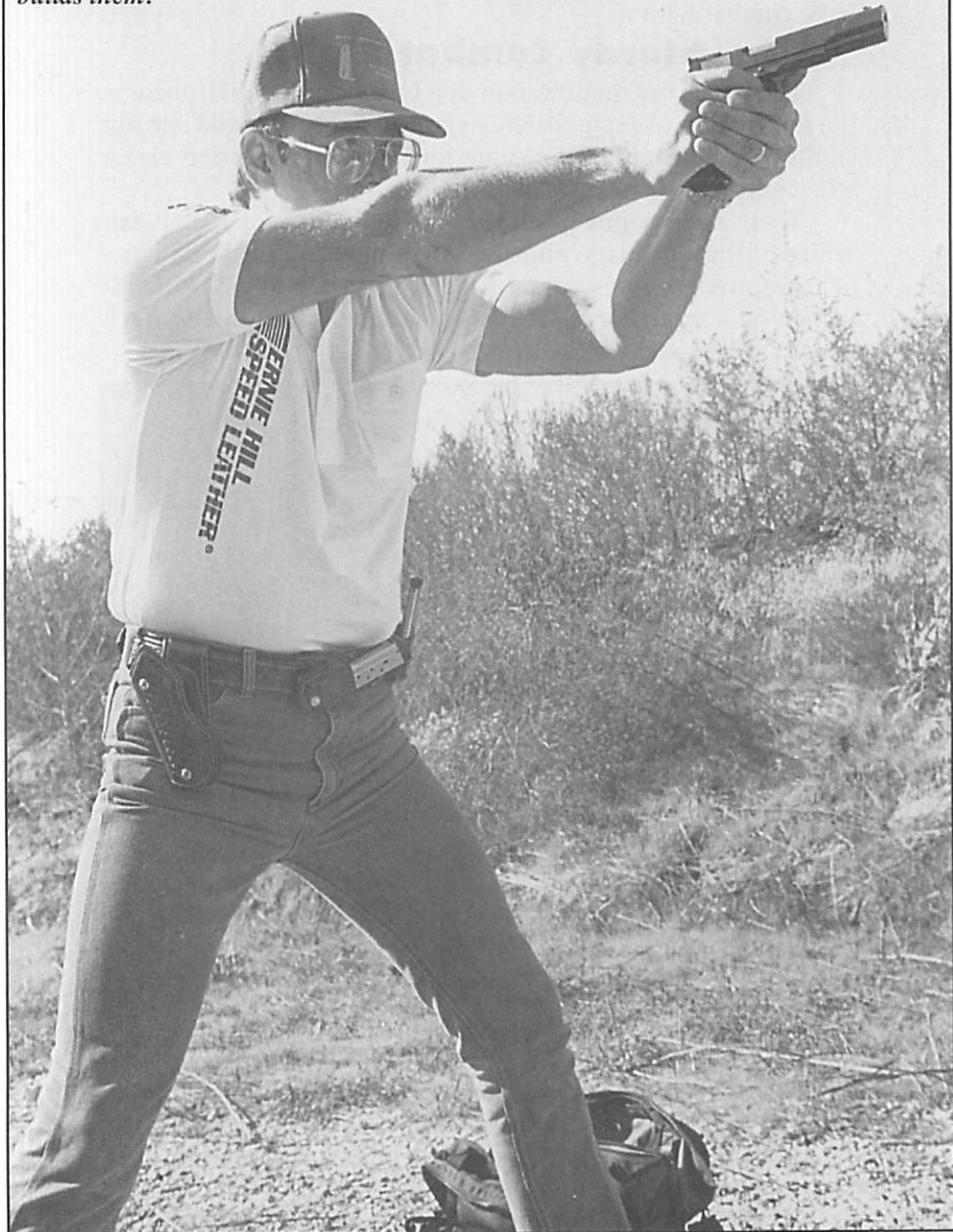


However, optical sights are coming on like gangbusters in combat shooting matches. Jerry Barnhart of Team Colt won the 1990 US Nationals with a 30mm tube Tasco Pro-Point and then barely a month later Doug Koenig of Team Springfield won the IPSC world championship in Australia with a Tasco “big dot” sight.

Jerry proved that his remarkable discovery of optical sights

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Pistolsmith Jim Garthwaite shoots his guns aggressively and with great skill—the same way he builds them!

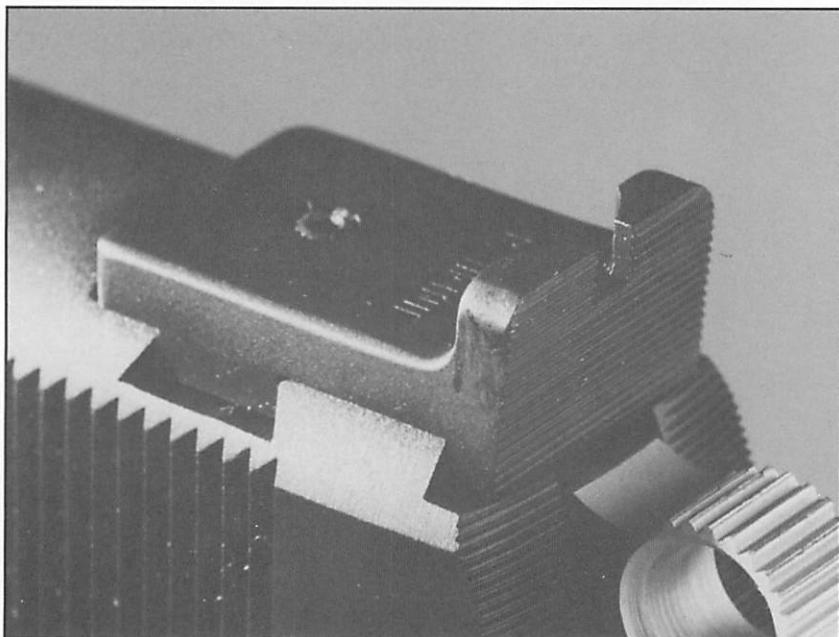


for practical shooting was no fad when he won the 1991 Steel Challenge with his Tasco Pro-Point. But I'll get back to the exotic electronics at the end of this chapter. For now, let's address the basic combat sight.

Sturdy Combat Sights

The first basic modification to a Colt or other 1911 pistol is the installation of high-visibility combat sights. Rugged, sturdy sights are the name of the game for both a competition and a street gun, and there are a lot of choices.

There's the popular "basic black" ensemble, or the stylish white-outline package and the latest new fad on the all the factory guns, the three-dot package. If you want to get really hi-tech, you can go for a set of radioactive, glow-in-the-dark tritium night sights.

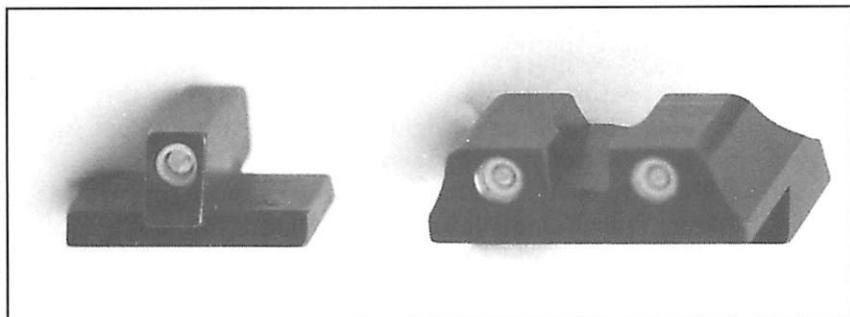


Richard Heinie's fixed sight offers a broad, serrated blade.

Factory sights from most manufacturers have gotten a lot better in recent years—witness the Novak sight on box-stock Smith & Wesson pistols—but there's still room for improvement.

Even the alleged "high profile" sights on the top-dollar Colt

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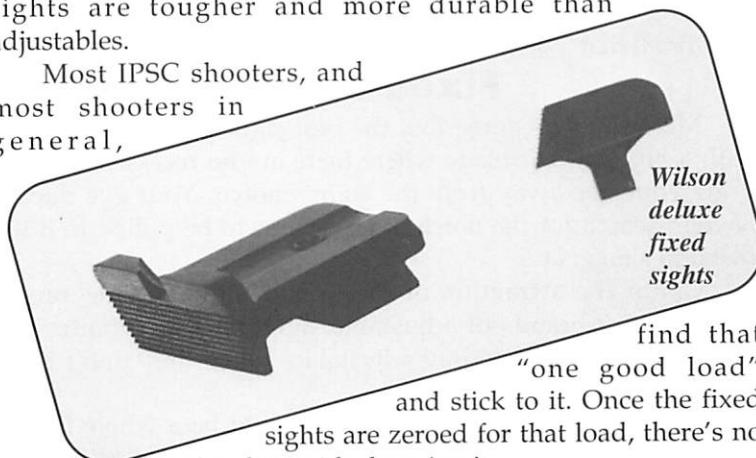


Wilson Nite-Eyes feature a snag-free profile and a bright green tritium dot in the front with subdued yellow dots at the rear and they're fully machined from bar stock too.

Combat Government Model are too small, too sharp and too fragile for a serious combat pistol. The "flying squirrel" sights on Colt's Gold Cup are notorious for shearing off in mid-string of fire. There must be a better way!

Sturdy, hi-viz sights are a must on a combat pistol, but they don't necessarily have to be a set of the name-brand, glamorous adjustable sights. A majority of shooters will find fixed sights just as useful for most applications. In fact, a self-defense combat pistol is more appropriate for fixed sights because fixed sights are tougher and more durable than adjustables.

Most IPSC shooters, and
most shooters in
general,



The main reason we sell adjustable sights is for the serious competitor who shoots numerous different loads for the different types of events and matches. The sight setting for a moderate Bianchi Cup load, for example, will be considerably

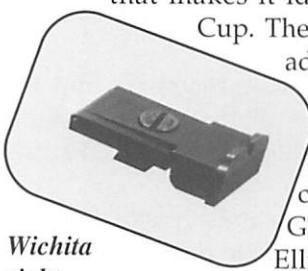
higher than for the stouter recoiling, heavy-bullet loads for the Second Chance bowling pin match.

The sight setting for IPSC would fall in between the two and a shooter with adjustable sights would be all set to use the same gun in these different circumstances.

Another advantage of adjustable sights is the sight picture. The Bo-Mar, Wilson and Wichita sights feature big, bold sight pictures that are so sought after by competition shooters.

Gold Cup Combat Sight

Perhaps I better point out one attribute of the Wichita sight that makes it ideal for installation on the Colt Gold Cup. The Gold Cup comes with Colt's Elliason adjustable sight, which is just not rugged enough for practical shooting.



*Wichita
sight*

The big plus of the Wichita is that the base is long enough to fill in the considerable hole left in the top of a Gold Cup slide when you sail that Elliason unit out a third story window.

The Bo-Mar base is too small to cover the gap.

If you want to install a combat sight on your Gold Cup, you have a choice of welding up the hole, recontouring the metal, recutting for a Bo-Mar and simultaneously taking out a loan to pay for all that... or you can install the Wichita.

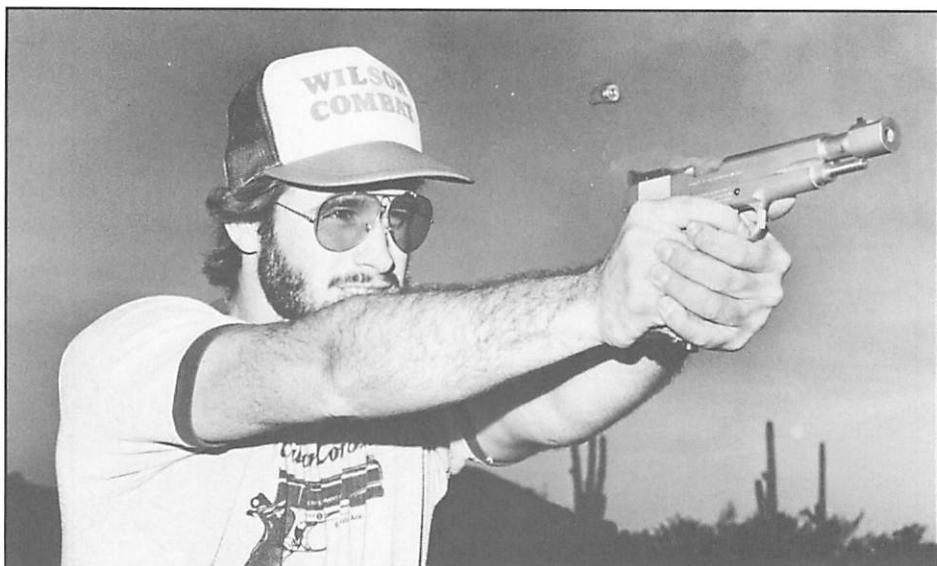
Fixed Sights

Most shooters agree that the best sight picture is obtained with a big, flat rear blade where there are no recessed edges to draw your eye away from the sight's notch. Your eye doesn't have to search for the notch, it just seems to be pulled to it like metal to a magnet.

Given the attraction of the "sexy" sight picture on the "glamorous" brands of adjustable sights, it's no wonder that many shooters tend to buy adjustables when they don't really need them.

That's fine, I guess, because life would be a whole lot less fun if we had to make do with only what we "need." Still, we've got a responsibility to tell you straight what you might really need on a combat pistol and what you might be better off forgetting, so it's back to the same thing— most shooters don't need adjustable sights.

THE COMBAT AUTOMATIC



Rob Leatham might have changed guns from this .45 ACP Accu-Comp to a 9x21 Springfield P-9, but he still concentrates on his sights! (Even if they are electronic red dots!)

Nyle Leatham photo

They've read in *American Handgunner* and other magazines that all the top competitors use Brand X, or that so-and-so says you absolutely can't leave home without Brand Y, and so the shooter naturally wants to have them too. If you really are that good of a shot to be able to use that micro-fine one click of adjustment, then adjustable sights are for you. Or if you shoot a lot of different loads for competitions or hunting, then you might want to consider adjustables.

But for the average person just getting started in combat shooting, fixed sights are just fine. I started shooting with fixed sights and so did a whole lot of others. You're better off putting your money into practice ammo and you should stick to one load anyway.

Front Sights

Sight modifications, however, go far beyond the rear sight. The front sight is every bit as important. There's a common misconception that the only way to get a front sight to stay in place is to silver solder it in place.

Well, that's a lot like the common misconception that you



Bo-Mar adjustable sights are the standard against which all others are judged. The Bo-Mar offers an unsurpassed sight picture coupled with a durability that would rival an M1 tank!

need an adjustable sight. The fact is that we've worked out a proprietary system at Wilson's Gun Shop that makes silver solder unnecessary. We use a swaging system to hold the front sight—and no it's not like the old "peen in" trick.

Our sight-swaging system is so reliable that we have never had a failure. Not once has one of our front sights come off. We've got a simple guarantee—if it shoots off, send it back and we'll replace it for free.

If properly done, the front sight doesn't need to be silver soldered, which means that you don't have to pay for the slide to be refinished. However, if the sight is incorrectly peened or staked on, it's going to shoot off.

We use an MMC swaging tool to install sights, but we perform a couple of modifications to the slide before we start to install the sight. While we're installing it, we also use an industrial-strength Loc-Tite sealer under the sight to give it that little extra holding power. Once we're done, that little jewel

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doesn't have a chance of coming off!

The swaging system on front sights works at least as well as a good silver solder job, and a whole lot better than a lousy one.

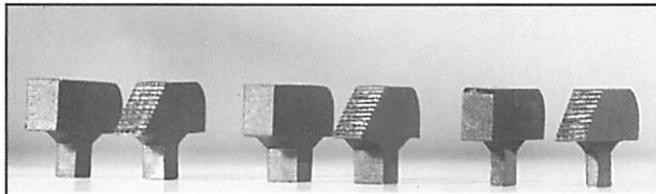
Good silver solder work is harder to find than you might think. If you do happen to run across that method, there's you can't really look to see if it's done right or not. All you can see is the silver solder around the edges, and all that tells you is that there's solder around the edges. There's no way to tell if the solder flowed down under and around the sight like it's supposed to.

The result is that many silver solder jobs will let go just like a poorly done staking job.

However, there is one important qualification that is absolutely necessary for the above to apply. The front sight *must* be machined out of bar stock for the swaging method to work as well or better than silver solder.

We've discovered that a cast front sight, that's been properly staked in place, can sheer off under recoil even though it won't shoot loose. The problem is the grain in the metal. Cast metal has no grain to it. Machined front sights that are milled with the grain

Most combat shooters prefer an improved ramp front sight. The improved ramp provides a good compromise between good visibility in the sun and clearing leather without scraping the holster.



Front sights come in plain or serrated, post or square and also in different widths (left to right) .074", .125" and .055". The .125" is the most popular for combat pistols.

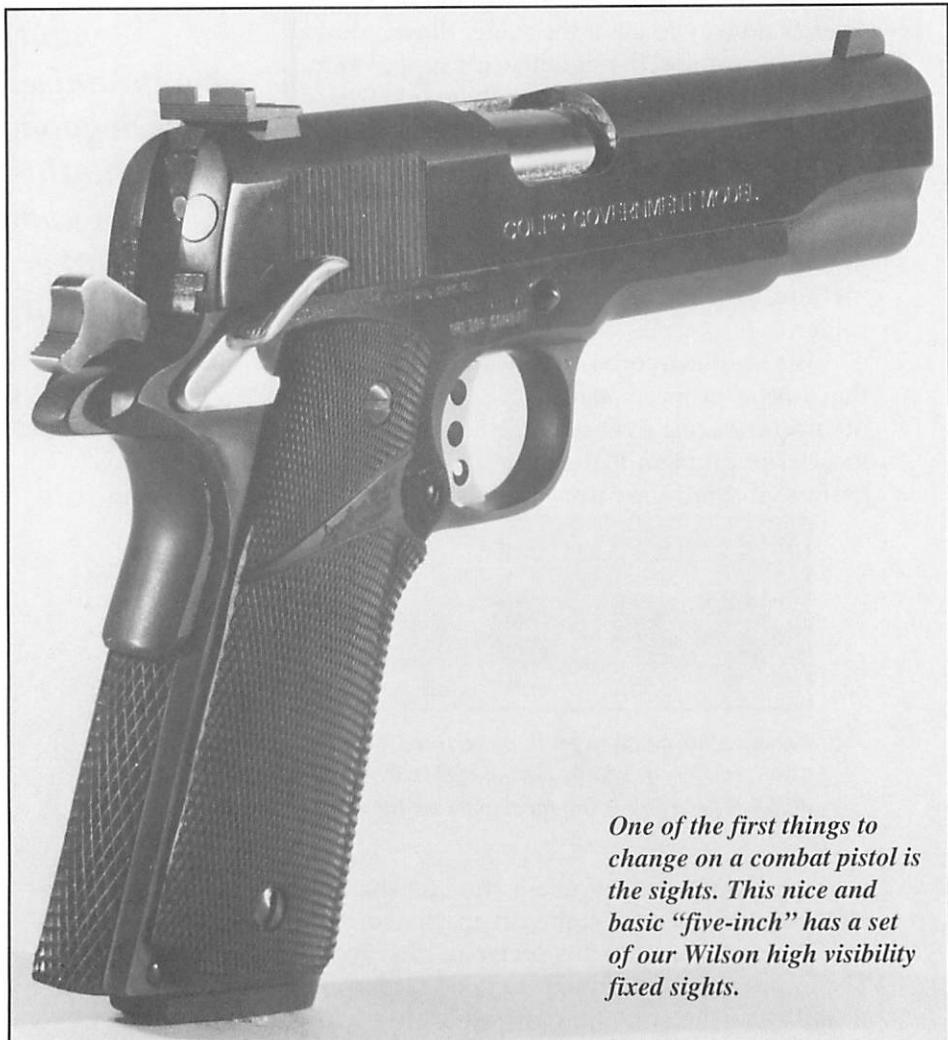
running lengthwise are much stronger than castings. Our front sights and MMC front sights are machined.

Most combat shooters prefer an improved ramp front sight. The improved ramp provides a good compromise between good visibility in the sun and clearing leather without scraping the

holster. Serrations on the ramp are even better to dissipate the glare of harsh light.

Post Versus Ramp

Well, I guess I've never been accused of being a fad follower—I prefer a post front sight. Sometimes called a Partridge sight (and often misspelled *Partridge*, like a bird), the post front sight seems to have caught on since I began shooting with one in competition and began installing them as "standard" on Wilson Combat custom pistols. Rob Leatham



One of the first things to change on a combat pistol is the sights. This nice and basic "five-inch" has a set of our Wilson high visibility fixed sights.

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prefers a post front sight.

The reason I like a post sight is because it doesn't seem to matter what angle the sun is hitting the blade or what other light conditions might be. The sight picture remains consistent.

Furthermore, most modern holster, especially competition holsters, have sight tracks. These grooves are specially designed to keep the front sight from snagging by providing plenty of clearance... even for the most ferocious leather-slapper!

Colored Or Basic Black?

Black-on-black is the runaway first choice of the vast majority of combat shooters. You'll not see a serious competition pistol with anything except black sights, and often painted with "sight black" to make them even blacker!

Occasionally you might find a match where a competitor might dab on some red nail polish over the front sight simply for a bizarre stage where all the targets, for some dumb reason, are black.

The IPSC Nationals in 1988 used all black Pepper Poppers and there was a run on nail polish at the local Barry, Ill., drugstore. (Subsequently a rule change was implemented that said Pepper Poppers can be any color except black!)

Leonard Knight, one of the original Combat Masters, used a colored front sight but that was because he had eye problems, not by preference. A colored insert, the three-dot system or Millett's "Texas Longhorn" white sight are really only good for quick shots at close targets... and looking sexy on an otherwise drab gun.

All you really get is a lot of clutter. Rarely do the various sight pictures line up when you have dots or stripes painted on top of plain black sights. Line up the three dots and the front sight is either above or below where it should be in relation to the rear blade.

Red inserts give you a different point-of-impact depending on what angle the sun strikes them. The bullet strike can change as much as four-inches at 50 yards! That's no good for a match gun.

Red inserts give you a different point-of-impact depending on what angle the sun strikes them. The bullet strike can change as much as four-inches at 50 yards! That's no good for a match gun.

Front Sight Brands

Stick with a black post or ramp front sight and a black rear sight.

The first is the standard hardball sight, as manufactured by Jim Hoag. It's rugged and simple and gives a much better sight picture than the standard Government Model sight. A similar sight is used on the new Colt Combat Government model.

Still, they don't offer the kind of definite sight picture that's so sought after today.

Another good fixed sight is the King-Tappan, which gives a shadow effect with a yellow dot at the front and a white square



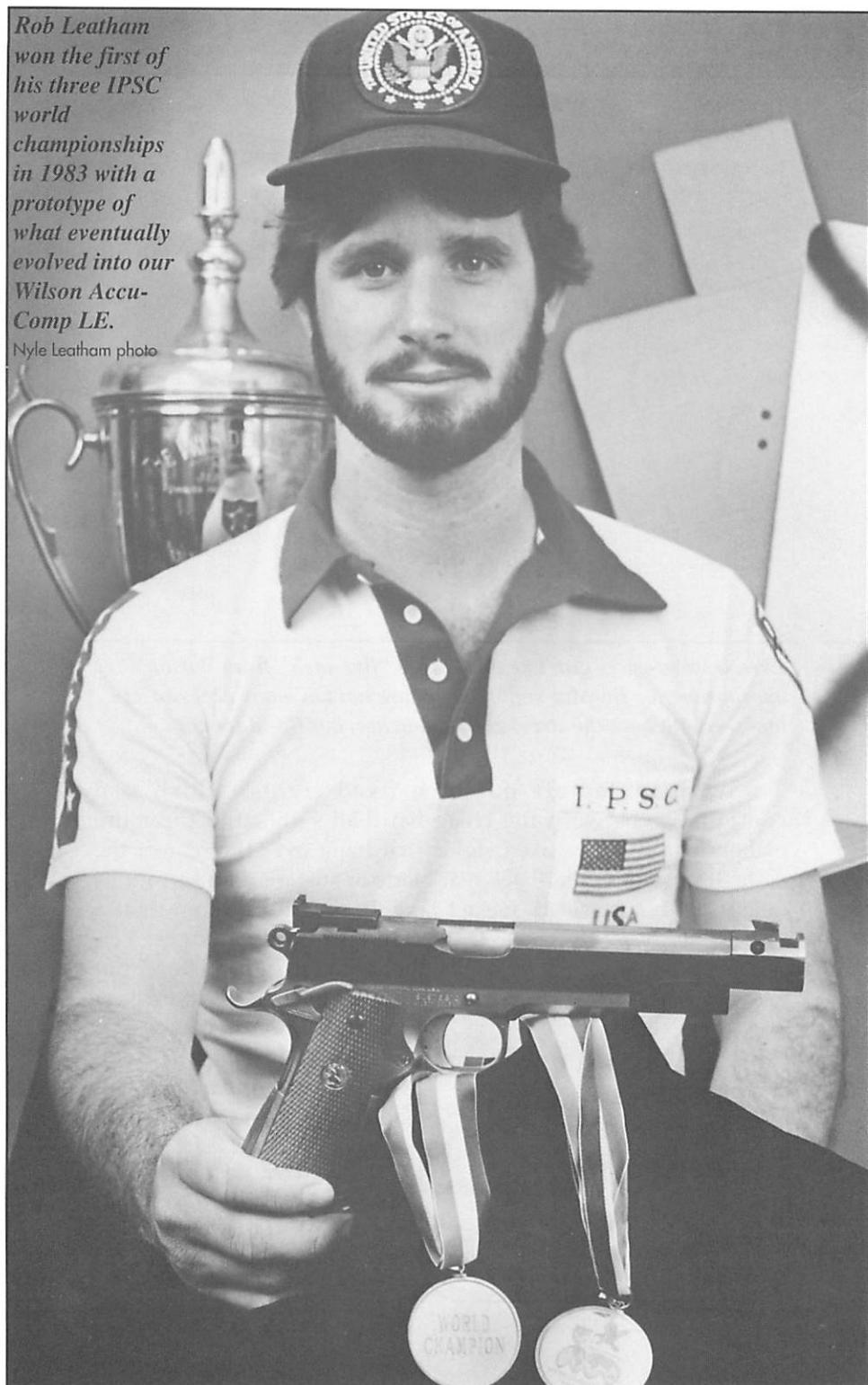
There might be an application for a laser sight on a SWAT entry team, but on a practical pistol that you'll wear everyday, it's absurd. Even the best laser sights are invisible in broad daylight and can only be seen in dark or dim light.

at the bottom of the rear notch. The rear notch is cut to provide the shadow effect, which has some advantage in bad lighting conditions. It's an excellent quick reference sight. If you feel you must have colors on your sight, or you anticipate close-range, low-light shooting conditions, the King-Tappan is one of the best.

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Rob Leatham won the first of his three IPSC world championships in 1983 with a prototype of what eventually evolved into our Wilson Accu-Cmp LE.

Nyle Leatham photo

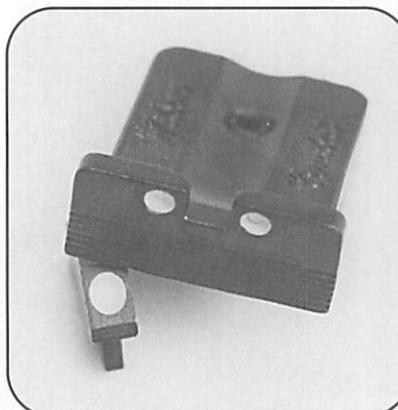




Even a street-carry gun like this classic "five-inch" from Wilson's is appropriate for Bo-Mar sights. There are not too many accessories that work on both the street and in matches, but Bo-Mars do!

We manufacture our own fixed sights, which is a compromise between the Hoag hardball sights and the more elaborate and larger fixed sights that hang over the rear of the slide. It provides a flat-back rear blade or surface with serrations below the notch, yet it doesn't take up any more room than a standard hardball sight. You get a better sight picture, but the sight is still compact enough for holster carry.

The sight is available in either black on black or with the three-dot system made



A Wilson fixed sight with the three-dot system is rugged and low-profile, and the dots are easy to pick up in low light.

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popular by Heckler & Koch on their autopistols. The three-dot option is good for quick reference, low-light conditions. I prefer this fixed sight with black-on-black sight picture, which is not all that surprising since I designed it.

New Generation Sights

From there we go to what might be called the "new generation" of fixed sights, a largely successful attempt to give the owner of the fixed sight gun the same sight picture as an adjustable (and expensive!) Bo-Mar. Such sights overhang the rear of the slide and actually give you the same big bold sight picture as a low-mounted Bo-Mar.



What's wrong with this picture? The sights are mounted way too high for a combat pistol, sure to snag on clothing or tear a gash in your hand if you have to do a "tap, rap, bang" drill to clear a jam.

As far as quick sight acquisition and a good sight picture, the new fixed sights are every bit as good as their adjustable brothers. These new sights can be installed without milling with only minor hand-fitting (with the exception of the Richard Heinie sight).

These sights are available from Armand Swenson—the Swensight—Richard Heinie, Millett Sights and others, as is a version of our own that we manufacture to our own rigid standards of quality.

While the new generation sights are perfect for the new competition shooter, the three other sights are better for the

person who's looking for a carry gun. They're less likely to hang up on clothing, and they're substantially smaller.

Fixed sights are really a personal preference. You can be competitive with fixed sights; the only place you'll lose a little ground is competing at the highest levels in multiple events.

There's no reason at all you can't go all the way to world class competition in IPSC with a fixed-sight gun. Pick your load and stick with it, and there's no disadvantage to fixed sights.

The overwhelming advantage of fixed sights is their low cost, plus the fact that most fixed sights can be installed locally.



The Aimpoint red dot sight is becoming popular on IPSC competition guns. The newer 5000 model has a much wider field of view 30mm tube compared to the one-inch tube on this 3000 model. Tasco also makes a good red dot sight, the Pro-Point PDP-3.

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If there isn't a person locally, most of the companies that offer fixed sights also offer modestly priced installation in two or three weeks.

At our shop, we offer a two-week turnaround on installing our own brand of fixed sights, as does King's Gun Works, Wayne Novak and Richard Heinie. It's a quick way to get shooting for one-half to one-third the cost of adjustables.

If you want the *piece de resistance* of fixed sights, pick your favorite and then send it to Trijicon for the installation of radioactive tritium night sights. Actually, you could have the little green dots installed on a Bo Mar or other adjustable sight if you want. But bring your banker—Trijicon is right proud of those glow-in-the-dark dots.

Bo-Mar BMCS Combat Sights

There are three top-notch adjustable sights available for the combat shooter: the Bo-Mar BMCS, the Smith & Wesson K-frame revolver sight and the Wichita.

The Bo-Mar is hands-down the best pistol sight on the market to put on a .45 auto. In a low mount, it works well for a carry gun with all the edges rounded. It is the optimum sight for a competition gun because of the super sight picture.



Bo-Mar sight nicely "melted" into an Accu-Comp.

BILL WILSON

Most gunsmiths mill the rear part of the slide down so that the flat of the new sight setting is the bottom of the old dovetail. Most normal low mount jobs utilize a front sight that's anywhere from .185" to .190" high, which is plenty high enough to keep you from seeing the slide in your sight picture, but low enough to keep from snagging in the holster.

S&W K-Sights

The second best sight in terms of ruggedness and dependability is the S&W K-frame revolver sight. The K sight is generally sold to the customer interested in a defensive or carry type gun. The S&W sight is lower, more streamlined, more out

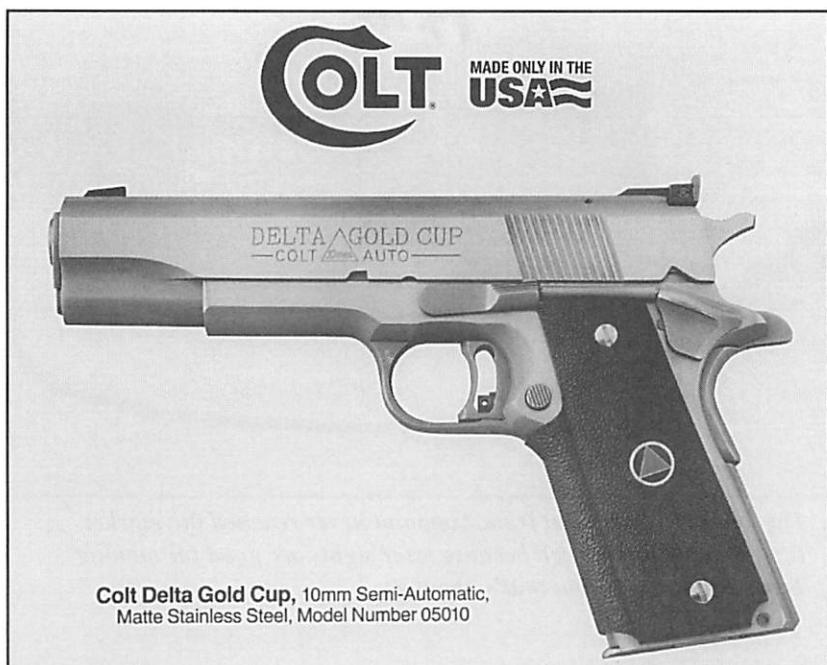


Smith & Wesson K-sights used to be quite the rage for mounting on Colts. S&W doesn't seem to know a good thing when they see it — they use a completely different sight on their autos, ignoring the excellent K-sight altogether.

of the way— actually smaller than a lot of fixed sights. It makes a very good set of adjustables to go on a defense gun.

The way we install the S&W sights is to swage a piece of

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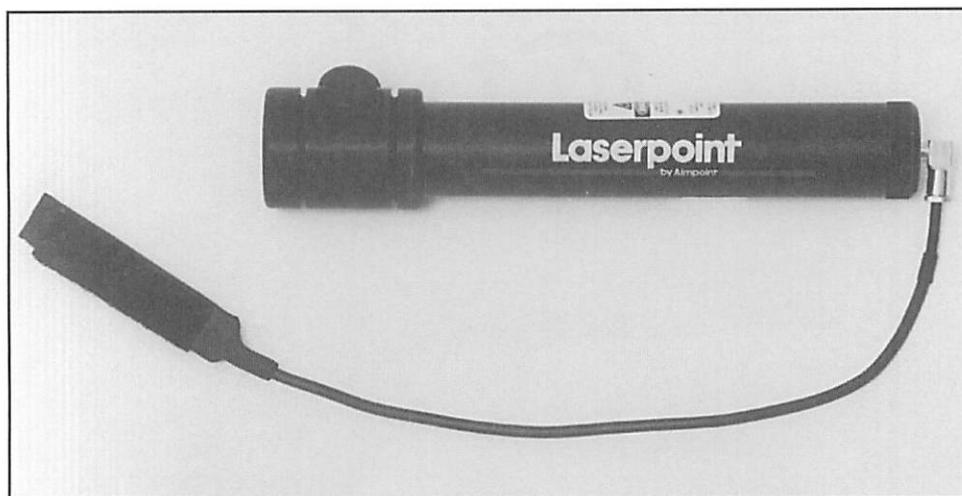
Colt Delta Gold Cup, 10mm Semi-Automatic,
Matte Stainless Steel, Model Number 05010

Colt has redesigned the Elliason sight they use on their Gold Cup to help eliminate the problem of the sight pin breaking. They'll find out if their fix cured the problem right quick with a 10mm Delta Gold Cup!

metal in the existing dovetail and file it down—we don't weld it up as many people do. Then we make our milling cuts. For the front screw that holds the sight on, we use a 6-48 hardened Weaver scope base screw, Loc-Tited in, which will never break.

Instead of using the little S&W shoe for elevation on the rear, which gives only about ten clicks of elevation before it pops loose, we use a special 6-48 elevation screw that is tapped directly into the slide, similar to a Bo-Mar installation. That gives about three times the vertical adjustment that you'd normally get on a S&W sight, plus it beefs up the whole installation. We have never had a breakage—one of the "common" problems with S&W sights—on this type of installation.

If S&W K sights are put on properly, they're as rugged as any adjustable sight on the market. The reason the S&W sight fell out of favor on the competition circuit was that it just can't



The ill-fated Laserpoint from Aimpoint never reached the market. It's probably just as well because laser sights are good for making Terminator movies but that's about it.

offer the sight picture a Bo-Mar can.

I tried to shoot S&W sights for years. I was bound and determined to do as good with them as anybody did with Bo-Mars. I kept trying and trying and trying, and I never could get the kind of performance I wanted out of my guns.

I changed slides and went to a Bo-Mar sighted slide, and my shooting improved overnight. Two weeks after I shifted to Bo-Mars, I finished third overall at Second Chance, my best finish to that date. It was a dramatic improvement. But the S&W still makes good sense for a carry gun.

Wichita Combat Sight

The third sight we recommend highly is the Wichita sight. It really doesn't offer anything that the Bo-Mar doesn't offer, with the exception of its extra length which, as we mentioned before, allows it to be mounted on a Gold Cup and cover the original milling. It's a similar sight to a Bo-Mar and offers the same sight picture.

The Wichita is a little easier to install because it has a self-contained elevation screw, so the slide doesn't need to be drilled and tapped. The only serious drawback with the Wichita is that it doesn't have positive click-stops in its adjustments and it

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doesn't offer the superb (and patented) sight picture of the Bo-Mar.

Bo-Mars are usually in short supply, but most of the larger pistolsmith operations have them in stock. And in case you're into shooting trivia, the name Bo-Mar is for Bob (Bo) and Mary (Mar) Walker, the husband-wife team that runs the Bo-Mar operation in Texas.

Those three sights fairly well encompass our recommendations for a combat gun.

Other Adjustable Sights

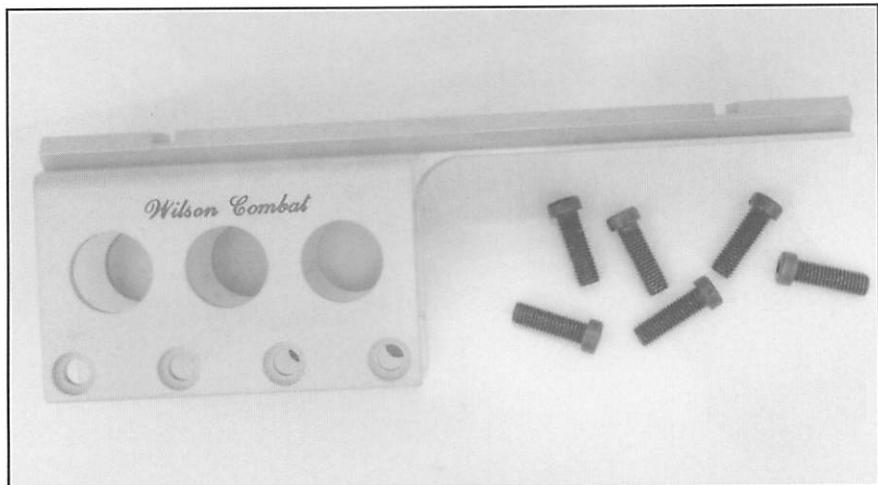
There are numerous other adjustable sights on the market, and many of those sights are made from investment castings.

Investment castings are great for a nice bold fixed sight or numerous other gun parts. They are not great for an adjustable sight, because there are too many tiny places— where the sight is threaded for the elevation screw or whatever. In the field, investment castings have not held up as well as adjustable sights, and we don't recommend them.

It's probably worth mentioning the old standby for the Colt, the Micro. It's as strong as the Bo-Mar, an equally high quality sight, but it's got one tragic flaw: It doesn't have that nice bold sight picture, and so despite its high quality, it has lost popularity with combat shooters.

The Red Dot Revolution

A Wilson mount for attaching a red dot sight to a 1911 pistol.



BILL WILSON

When Jerry Barnhart won the US Nationals in 1990 with a Tasco Pro-Point, people were shocked. In a sport that prides itself (and rightfully so) on its open-mindedness and innovation, practical shooting was stunned that an electronic sight could win a Nationals.

The effect was instantaneous. Before you could say "Follow the bouncing red ball," everyone was clamoring to get a Tasco or an Aimpoint. Overnight scope mount makers popped up like daisies.

Jerry had started a small revolution in practical shooting and I don't think we've seen the half of it yet. As this book is written, not even a year has gone by since Jerry's dramatic win and already the scope technology has progressed further than it has in the past 10 years!

Overnight people were switching to the hot new setup. Doug Koenig went Down Under to win the World Shoot in Australia with a Tasco. Jerry rebounded at the very next opportunity to win the 1991 Steel Challenge with a Tasco. Top lady Judy Woolley also used a Tasco as did many others.

A Tasco sight features a big dot and wide field of view.



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In six short months, the change had swept through the ranks of pro shooters. The Aimpoint 5000 with the new "big dot" and the Tasco PDP-3 were harder to find than a Model 29 in the Seventies.

Even now the changes are happening so fast that these two popular scopes will probably be replaced by newer models by the time you read this. What shooters want in a red dot scope is a wide field of view and a bright easy-to-pick-up dot. The manufacturers are listening.

Aimpoint showed a prototype of their new "Square View," a huge scope with a rectangular screen that looks like a Sony Watchman™ TV screen. Tasco is no doubt up to something good. A 40mm scope is said to be in the works from a company called Shanon Optic.

So just when you think you have the latest word on optics, they come out with a new one.

Custom Combat Grips

While there are literally hundreds of custom grips available for the Colt, there are only a few that have caught the fancy of combat shooters.

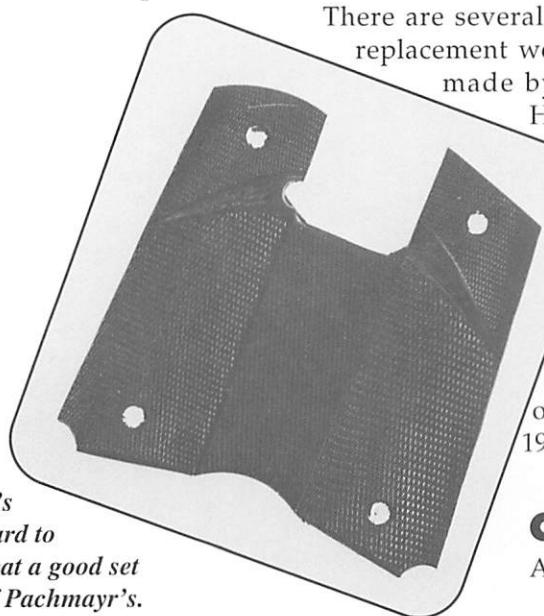
The first is the plain-Jane stock wood grips supplied by Colt which, along with a checkering or stippling job on the front strap and mainspring housing, is very popular among competitive shooters.

There are several high quality, attractive replacement wood grips, such as those made by Hogue, Ahrends and Herrett, to dress up a custom gun. They're available both checkered and smooth, with diamond panels and without.

However, there are a number of other styles of combat grips for the 1911 pistol.

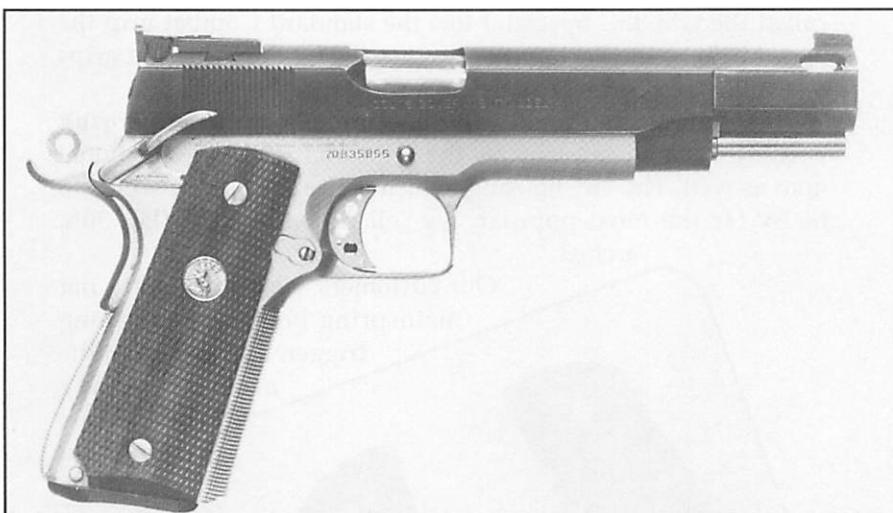
Pachmayr Combat Grips

A favorite of many is the

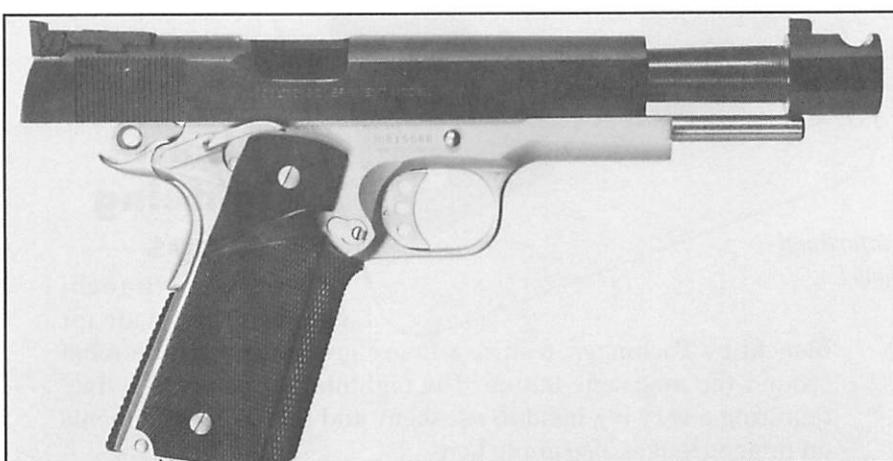


*It's
hard to
beat a good set
of Pachmayr's.*

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Stock Colt grips (above) on a Watson custom .45 are still very attractive, but many shooters prefer the sure grip of a set of Pachmayr's (below) on a Wilson Accu-Comp "LE."



Pachmayr. Of most interest to combat shooters are the two versions of Pachmayr's Combat Model grip. The first is the GM-45C, which features flat neoprene-coated steel panels and their distinctive wrap-around neoprene sleeve for the front strap.

The second Pachmayr Combat model is scalloped out for the magazine release, but includes the traditional palm swell,

called the GM-45C Special. I like the standard Combat grip the best. I believe the Pachmayr grips are the best aftermarket grips available.

Pachmayr also makes the neoprene-coated mainspring housing, which complements the grips and is a very functional item as well. The "B" housing, which is the flat model, seems to be by far the most popular; we sell probably 70% flat, 30% arched.



Safariland
grips

Our customers seem to prefer a flat mainspring housing and a long trigger, as opposed to the arched housing and short trigger on the stock Colt.

The Pachmayr housing is a good, low-cost alternative to checkering or stippling.

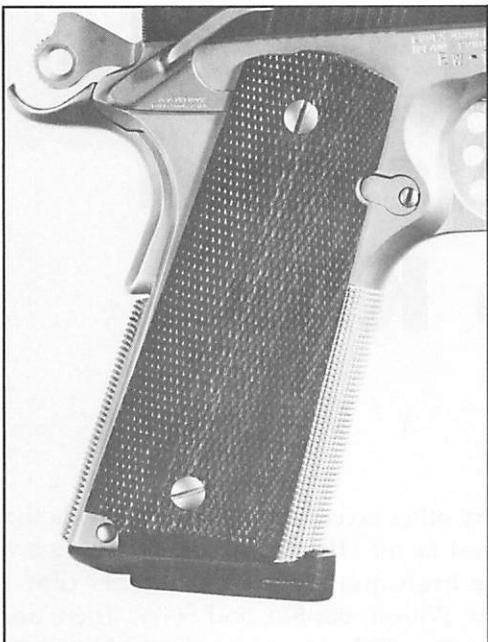
Bianchi Lightning Grips

The Bianchi Lightning grips, made for Bianchi by Pachmayr, feature a finger groove and a little relief around the magazine button. The Lightning grips are very big, requiring a very big hand to use them, and the earlier comments on finger grooves also apply here.

Safariland PPS

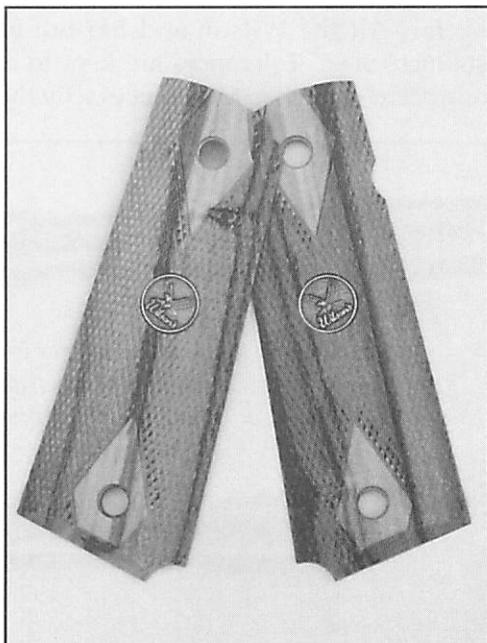
Another popular grip is the Safariland PPS, a composition grip with a swell at the bottom of the grips that forces the hand up into the grip safety under recoil. In theory, it makes your grip tighter as you shoot, although in practice I have had a little more trouble getting a good grip out of the holster with them.

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Guy Hogue and his sons Aaron and Pat make some of the finest combat grips (left). The Hogue trademark is exquisitely checkered grip panels sculpted from rare and exotic hardwoods like this set of gorgeous Kingwood.

The exotic wood custom grips from Wilson Combat feature fine cut checkering, beautiful wood and the wilson eagle logo. They're available for both full size and officers model pistols in Ebony, Kingwood, Coco Bolo, Rosewood and Tulipwood.



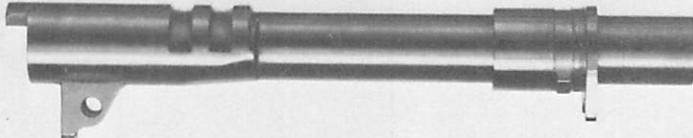
Match Grade Barrels and Comp Kits

More than any other accessory, a match barrel is the single largest factor affecting accuracy. There are only three high-quality match barrels that I recommend: Wilson, Bar-Sto, and SGW. There are a few military match barrels still floating around which may or may not be any good.

Of the bunch, I feel the Wilson and the Bar-Sto are the best by far. All the Wilson and Bar-Sto barrels are heat-treated stainless steel. Tolerances are kept to a bare minimum—from one barrel to the next, you get exactly the same thing.



The secret to top-notch accuracy is a match-grade barrel like these stainless steel barrels from Wilson's. Note the target-style, or "solid," bushing that comes with them.



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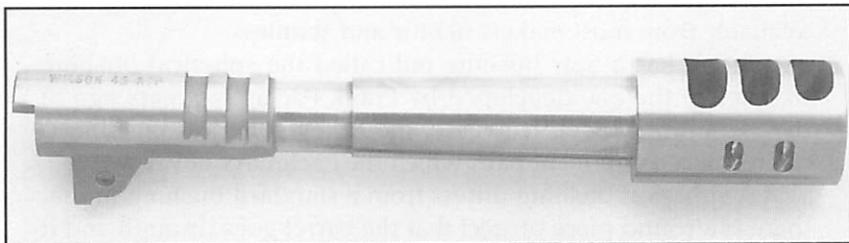


Match barrels come in all lengths, not just Government-size. This Bar-Sto match barrel is for a Commander, but you can get an Officers Model match barrel too. Wilson match barrels include a ramped .38 Super for the utmost in both safety and accuracy.

There is very little difference between the Wilson and the Bar-Sto barrels as both are manufactured from 416 stainless and heat treated for maximum strength and wearability.

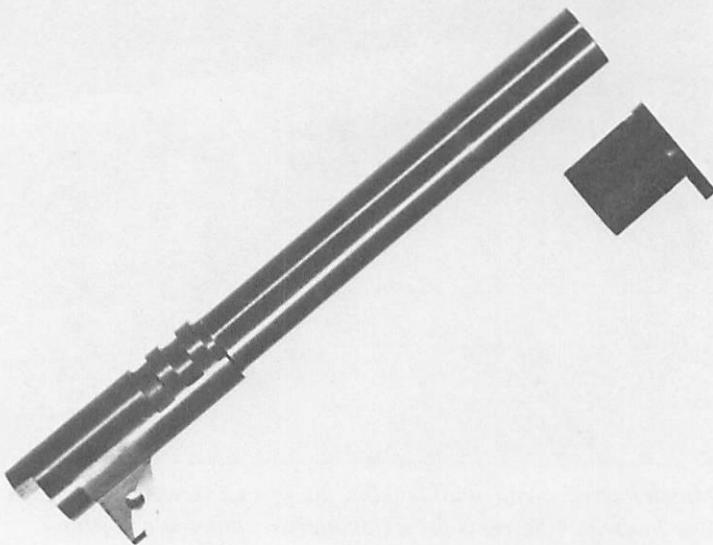
Both barrels are very durable and will last 50,000 rounds-plus with normal pressure lead bullet loads. Most of the top pistolsmiths use Wilson or Bar-Sto barrels in their conversions.

Tapered cone compensators as used by Jerry Barnhart require extensive fitting when properly installed, therefore are often shipped "in-the-white".



Target Barrel Bushings

All the top barrel makers usually include a target-grade solid barrel bushings. Bar Sto, SGW and Wilson make good



For a part that looks fairly simple, a match-grade barrel is really hard to manufacture. Some portions of our Wilson barrels have less than a thousandth's (.001") tolerance! The heat treating is a science in itself. Wilson barrels are rifled to exacting standards and our heat treat runs from 38 to 42 Rockwell "C".

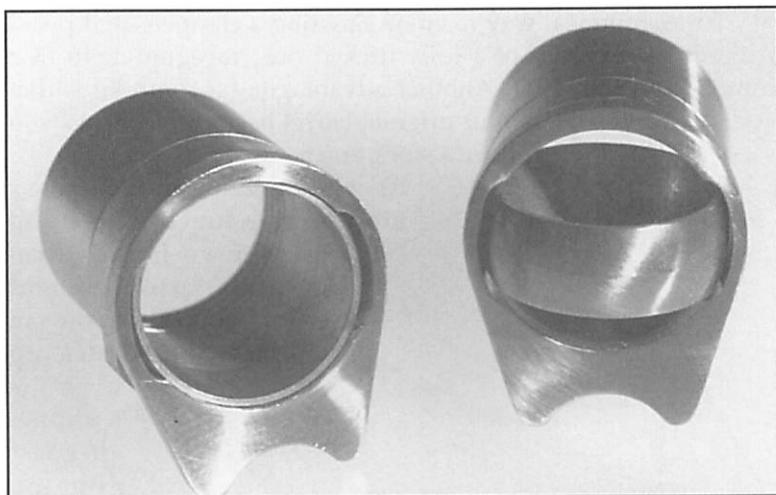
ones, but how good a target bushing is really means how well it's installed.

Most gunsmiths, when they fit a target bushing, will relieve the barrel behind the bushing so it doesn't drag when it unlocks, allowing a tighter fit in the closed position. Bushings are available from most makers in blue and stainless.

Briley has a new bushing out called the spherical bushing that is like the one developed by Frank Pachmayr years ago in the Signature Model. However, the Briley spherical bushing is offered as a component part, which the Pachmayr never was.

A spherical bushing differs from a standard bushing in that there is a round piece of steel that the barrel goes through and it

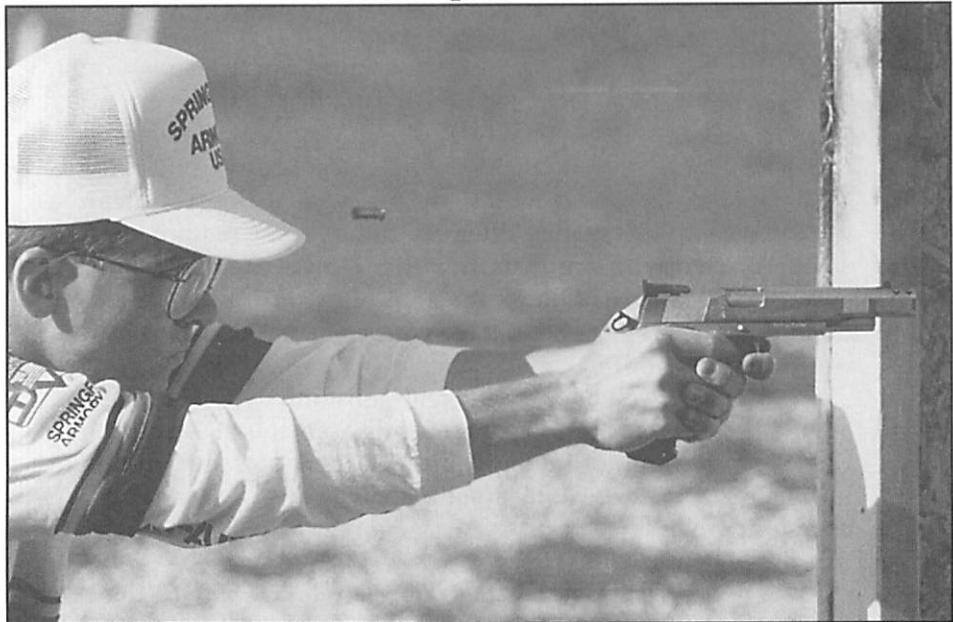
THE COMBAT AUTOMATIC



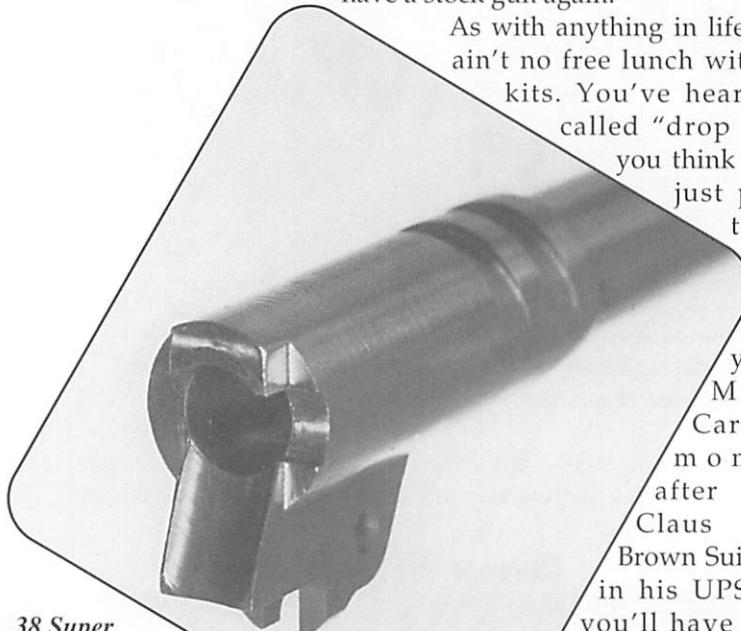
The Briley spherical bushing is a new product that I haven't tested, but it should work theoretically.

this round piece of steel—the sphere—that actually locks inside the bushing itself. Theoretically this enables you to fit the barrel and bushing tighter.

Comp Kits



An economical way to enjoy shooting a compensated pistol without the expense of a fully tricked out "racegun" is to fit a comp kit to your 1911. Another advantage of a comp kit is that you can simply drop your original barrel back in place and you have a stock gun again!



A .38 Super barrel should be ramped for safety in shooting IPSC rounds.

As with anything in life, there's ain't no free lunch with comp kits. You've heard them called "drop in" and you think you can just pick up the phone, order one on your MasterCard and moments after Santa Claus In the Brown Suit arrives in his UPS truck, you'll have a comp gun! Sorry, it usually isn't that simple.

Most comp kits "drop in" most guns, but *most* means *most*, it doesn't mean

all. Some comp kits require extensive fitting, some require just a stroke or two with a gunsmith's file. However, you should spring for a few extra bucks for a lot of extra confidence and (read this in bold print now) **have your comp kit installed by a competent gunsmith.**

You may well be a "competent gunsmith" yourself; there are many fine gunsmiths in garages and basements all across the United States. I'm not saying you don't know a #2 link from a locking lug, but please don't attempt to fit a barrel if you haven't been properly trained or instructed.

But on to the comp kits.

There are several goods ones on the market. Some I think

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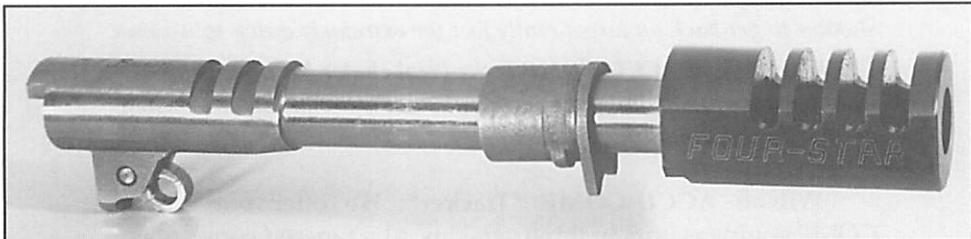


The new Wilson "Multi-Caliber" ACCU-COMP is an integral part of the barrel bushing and is designed to work with all 1911-style calibers as long as the barrel od is in the .578"-.581" range, requires no pistol modifications to install. are over-priced, but that's up to you the consumer to judge quality versus cost for yourself.

Here's a rundown on some of the more popular ones on the market. I have not included a price because sure as Monday follows Sunday, they will all go up!

BAT: is an acronym for Better Accuracy Technology and these folks make quite a few versions of their popular BAT

Brown Four-Star



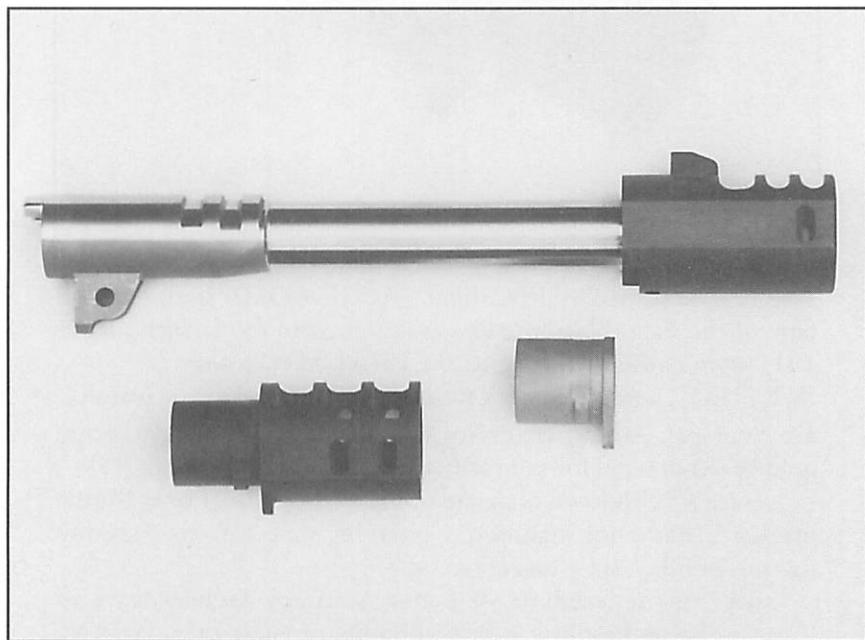
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comp. They have a full-slide profile (with and without barrel) and half-slide profile (with and without barrel). They also offer a complete "top end" consisting of barrel, comp, slide and rear sight.

Brown Four-Star: going the double-chamber comps one better, Ed Brown has introduced his quad-chambered comp in blue and stainless, either separately or with a barrel.

Heinie comp: Richard Heinie designed the Springfield Armory Kwik-Komp but I guess he decided to keep his next design to himself. His new one is a double-chamber comp, with or without barrel included.

Wilson Accu-Comp DP-K: We offer our unique dual-port



The Wilson Combat ACCU-COMP "Tracker" comp is designed to control lateral movement as well as muzzle rise. This allows the shooter to get back on target really fast for extremely quick split-times.

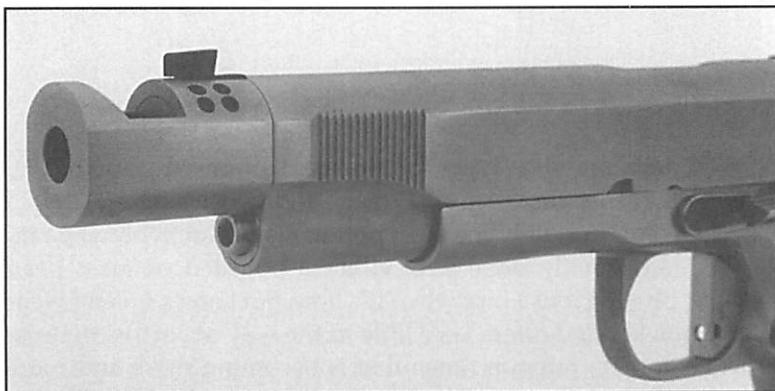
The bushing style ACCU-COMP is the ideal choice for those who want to occasionally use their carry gun with a compensator or when cost/lack of gunsmithing is a factor.

Wilson ACCU-COMP "Tracker": We offer our ACCU-COMP compensators in three versions. #1 a tapered cone version

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that locks-up directly in the slide without a bbl. bushing. This compensator was designed with the aid of top shooter Jerry Barnhart and is the version he uses in competition. It also features a full length guide rod with reversed plug. Version #2 is the same basic compensator, but is attached to a bushing style barrel. This version is extremely popular with shooters who shoot a lot of light "steel" loads. The last version is for use with a standard barrel and is part of the barrel bushing. This compensator can be installed by simply changing out your barrel bushing and usually does not require the aid of a gunsmith.

VIC Battle Comp: Pete Viceroy at VIC Int'l has a curiously



Vic Battle Comp

Dave Anderson photo

shaped comp that is a double-chamber design but with tiny little holes in the rear chamber and a huge one in the front. VIC also makes other comp designs in various configurations.

Combat Finishes

There are five types of finishes commonly applied to firearms, three are blue/black and two are silver/grey in color. Certainly the most popular is common blueing and is normally done with either a polished or glass bead surface. Blueing looks nice when it's new, but shows holster wear pretty quickly and offers very little in the way of corrosion resistance. Another common finish that is becoming more and more popular, especially on carry guns is mil-spec parkerizing. It features pretty good wear resistance and very good corrosion resistance. If applied over a fine bead blast it also can be quite attractive. The last "black" finish is the Teflon/polymer type and the Roguard finish applied by Robbie Barkman at Robar Industries seems to be the best. This finish offers salt spray resistance in excess of 2,000 hours and wears a little better than mil-spec parkerizing.

Probably the most popular custom finish is industrial hard chrome as applied by companies like Metaloy and Metalife. This finish was made popular early on by Armand Swenson and offers certain advantages for a custom pistol. Those advantages are: it's satin silver color which most people find the most appealing of the silver/grey finishes, it's adhesion which enables it to bond to the metals surface forever if properly applied and it's hardness. At R/C 68-72, it's the hardest finish of the five. The last common finish is some form of electroless nickel such as the NP-3 applied by Robar. Electroless nickel in general and NP-3 in

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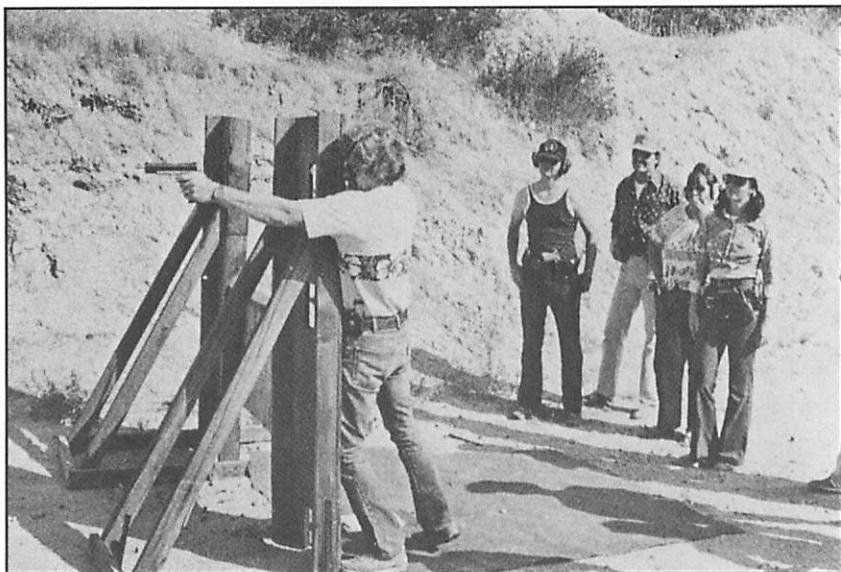
A good quality hard chrome plating like Metaloy is both good looking and functional. This is a good, basic combat conversion.

particular offer better lubricity and corrosion resistance than hard chrome but it's not quite as hard, nor do most people like it's color quite as well. I have found that hard chrome and electroless nickel wear about the same in actual use with hard chrome requiring more persistent lubrication.

My personal preference as to finishes is a fine blast mil-spec parkerizing or Roguard on a carry gun. Both finishes give me the satin black color, wear resistance and corrosion protection I want for a carry gun. For competition use where surface to surface wear from extensive shooting is my main concern, I prefer Metaloy hard chrome. Like Ken Hackathorn, Jerry Barnhart and others I have always liked the cosmetic looks of a two-tone pistol. A Metaloy finished frame mated to a Roguard finished slide makes a very attractive but functional option. Heat treat specifications on most 1911's call for the slides to be much harder than the frame so you still have a long wearing combination.

I feel that it's better to let a gunsmith send your pistol in for finishing since there is sometimes slight re-fitting to be done after the finish is applied and this way you will get back a safe and functional weapon.

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Combat Master Mickey Fowler always takes special pride in his equipment and some of his match guns are two-tone like this blue slide, Metaloyed frame gun he's teaching his ISI students with here.

True, it's going to cost more, but most gunsmiths deal with reputable platers, and a gunsmith will take care of any necessary adjustments after the plating is done.

Plating does change the tolerances in the gun, and sometimes some refitting is necessary. If you order plating through your gunsmith, you know the gun will be set up right when it's returned to you.

The only "disadvantage" to plating is cosmetic, however, most people seem to like the looks of a plated gun. If a plater could come up with a process that would plate a gun and leave a nice blue finish, he'd have the market cornered.

There are a number of chemical processes available now that can turn your pistol into a *Tangerine Colored Pin Striped Metal Flake Streamlined Baby*.

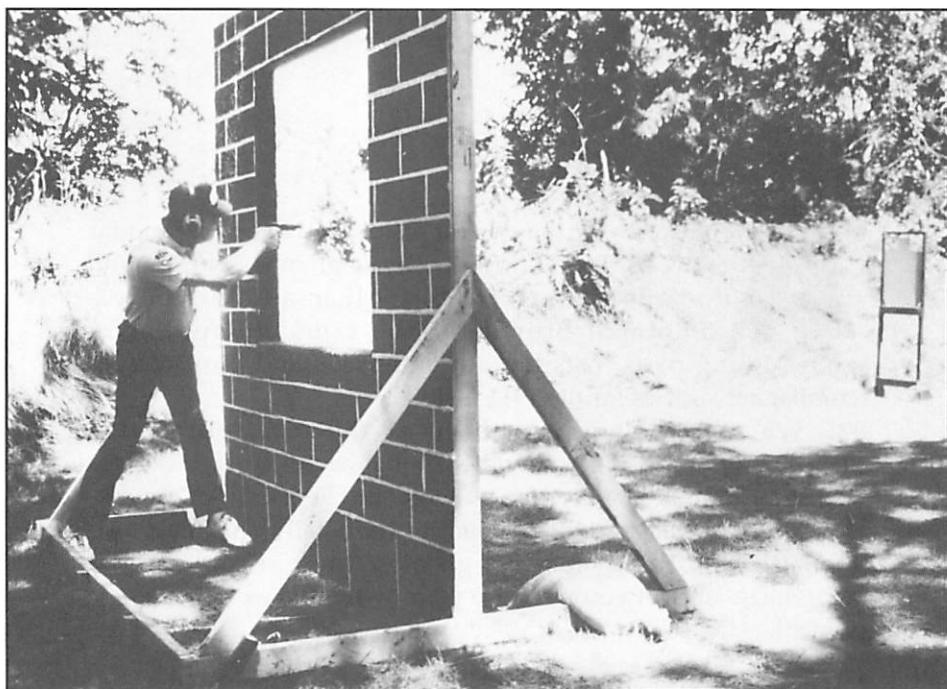
I won't venture to say what I think of bright red pistols with screaming yellow slides,

*I won't venture
to say what I
think of bright
red pistols
with screaming
yellow slides,
but it's a
definite case of
beauty being in
the eye of the
beholder.*

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but it's a definite case of beauty being in the eye of the beholder. The colored-gun finishes offered by Z-Cote and others are durable and fairly rust resistant and have the advantage of being able to apply the coloring to all materials equally, unlike bluing or plating which cannot be applied to, say, plastic or aluminum.

At least one company is offering black hard chrome, which is close to the aforementioned "blue plating." This is Shooters



Mike Dalton engages a target through a window. Note how the Southwest Pistol League champion is well behind cover. In the old days there used to be a penalty for improper utilization of cover, but it was abandoned when officials realized such a rule was virtually impossible to define and, therefore, to enforce.

Supply of South Dakota. Also, Robbie Barrkman of Robar in Arizona offers his unique NP3 finish and several other proprietary chemical-process finishes. I haven't tried all of the new "miracle finishes" out there, so I can't really offer an opinion based on experience.

Combat Accessories

Accessories for the combat pistol used to be few and far between. Today there are more gizmos, widgets and do-dads for the 1911 pistol than all other pistols combined! Brownells, the famous supplier of gunsmithing parts, lists literally hundreds and hundreds of combat accessories for the 1911 pistol.

We at Wilson's have been at the forefront of the development and innovation of combat accessories, but there are other brands that are also quite good. The gamut of goodies runs from the absolutely essential to the totally worthless and everything in between. I'll go over the various combat accessories and let you make up your own mind as to which are which!

Extended Combat Safety

One of the first parts from a new Colt pistol to get chucked in the circular file is that itty-bitty thumb safety. A combat shooter needs a fast, reliable safety, and that means an extended safety.

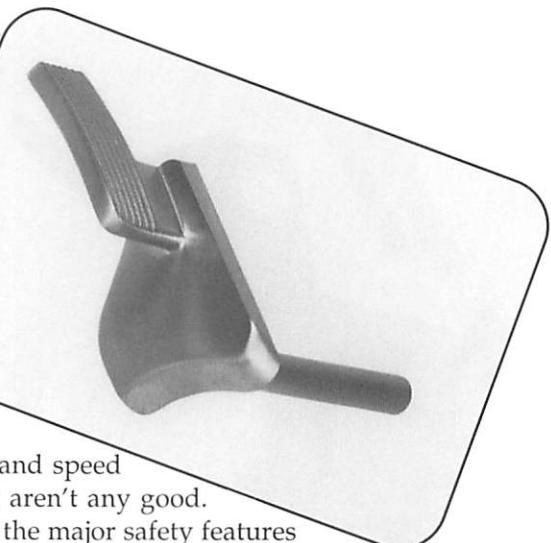
There are several different brands of extended safeties on the market that are worth looking into. The King safety is good, as is the extended thumb safety we make. The safety made by Armand Swenson is absolutely top-quality and sets a standard for the industry. Top-quality ambidextrous safeties are also made by Ed Brown, Wilson's and Safari Arms.

Most extended safeties are available in either blue or

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stainless, and some companies even offer them with hard chrome plating to match a chromed frame. As far as shape and style go, try to examine them all, as the shapes are subtly different, to see which suits you best.

There are many off-brand speed safeties on the market that aren't any good. The thumb safety is one of the major safety features of your gun, and it doesn't make sense to save a couple of dollars here. Buy a name brand for this option.



Extended Slide Release

If you must have one, the Wilson, Pachmayr and Cylinder & Slide are probably the best. None of them is worth the purchase price, in my opinion.

Beavertail Grip Safety

There are several different options here. First is the drop-in replacement for the standard grip safety, such as the one made by Colt and widely available. These just drop-in, requiring no modification to the gun at all, and they're fairly good. The drop-in grip safeties cushion the hand from hammer bite and distribute the recoil over a wider area.

They are not, however, nearly as good as custom-fitted beavertail, contoured to the frame to make a nice round surface. In custom beavertails, the Wilson and Brown models are very good.

We have two models of our own, the distinctively styled original and the new recessed-hammer version. Jim Hoag also makes an excellent beavertail. Ed Brown and Caspian have a recessed-hammer beavertails too.

Pachmayr came out with a neoprene-covered beavertail to match their grips and mainspring housings. It looks great, but I'm not really sold on it because the grip safety is one area



where your hand has to slide when you're getting your grip. The neoprene doesn't let your hand slide.

Most beavertails are available in blue or stainless, although the Colt drop-in replacement is available in blue only. This is primarily a competition accessory, although I don't understand why more carry guns don't have a beavertail. It's a truly worthwhile addition

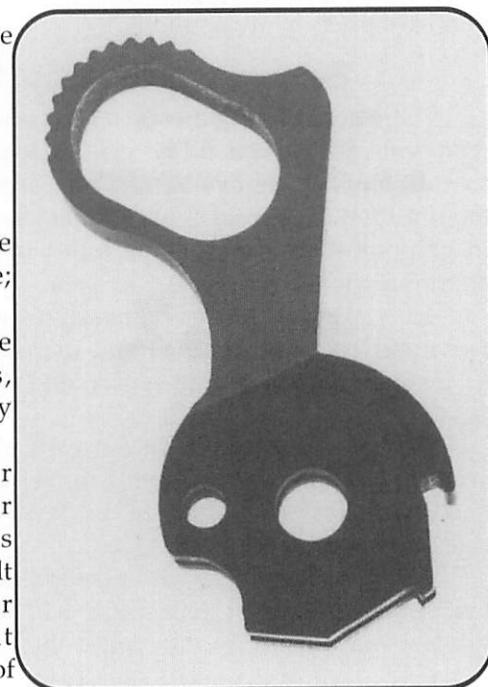
that has no negative side effects.

Combat Commander Hammer

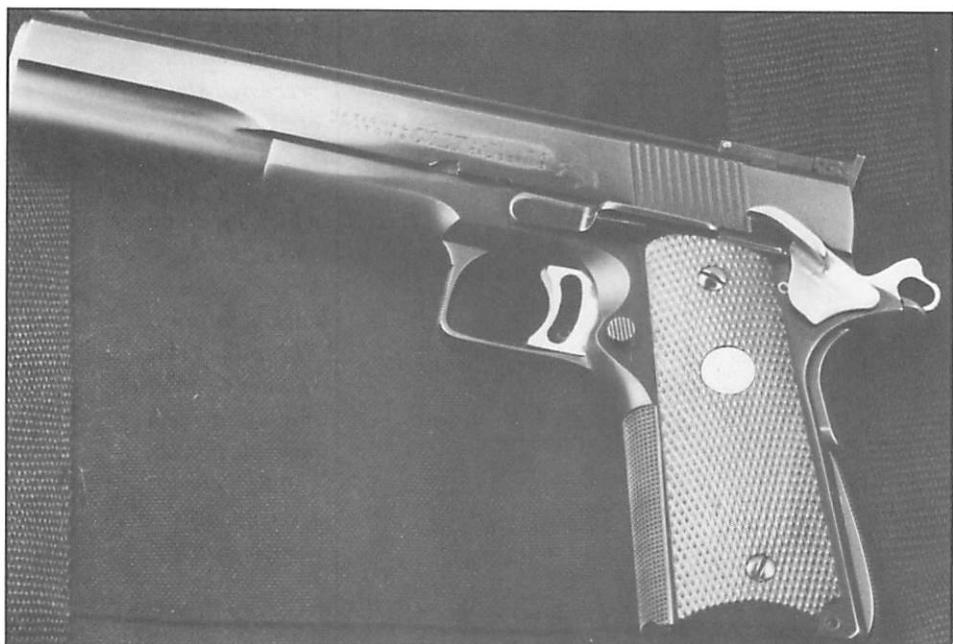
Once upon a time there were only three; now there are slews.

There were the original Colt parts, which are sporadically available today.

There was our original Commander style hammer which is very similar to the Colt Combat Commander hammer, except that we narrow the sides of



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A Jim Hoag full-house five-inch .45 boasts a handmade Commander style hammer plus an assortment of other accessories—how many can you count?

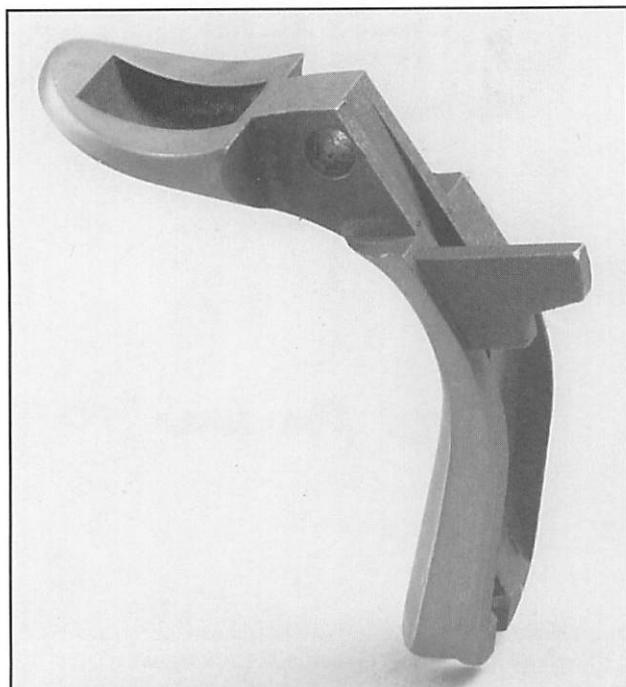
the hammer spur so that when it falls, it doesn't rub on the slide. In addition, the Wilson Combat Commander hammer has a slightly changed strut pin hole location, contributing to more easily obtained light trigger jobs.

And then there was the Safari Arms stainless Commander hammer, a replacement for the Colt.

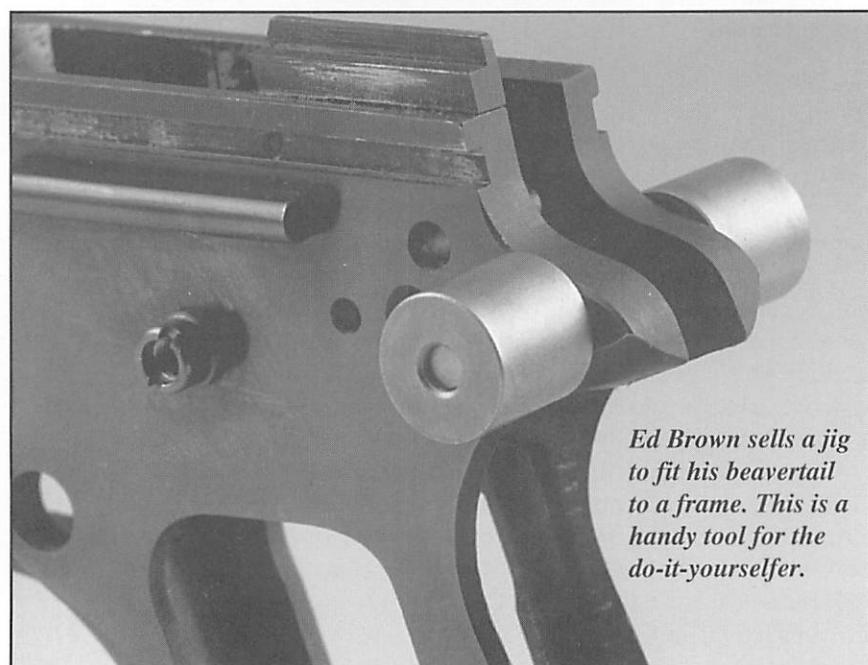
Ah, those were the days when everything was simple and you could count the types of hammers on one hand. Today it seems that every gunsmith with a shingle has a hammer—with a different shaped slot in it, of course. If you're a gunsmith and you don't happen to have your own hammer, why you just mill a new shape in the hammer spur and call it your own!

Jim Boland grinds his own hammer out of a stock Colt Government hammer; Steve Nastoff enlarges a Colt Commander hammer to his trademarked oval shape; Chip McCormick cuts his in the rectangular shape. Our standard hammers are round, just like Colt's, while our deluxe version features a oval slot.

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Ed Brown introduced the "recessed slot" style of beavertail. Wilson's also offers a "hi-grip" style in which the hammer sinks into the beavertail in the cocked position. This allows the shooter to obtain the highest grip possible thereby getting better leverage over muzzle jump.



Ed Brown sells a jig to fit his beavertail to a frame. This is a handy tool for the do-it-yourselfer.

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They're really all good parts and one is probably as good as the next except for the different styling that appeals to different tastes.

There's been a lot of hot air about hammers cut with an EDM machine (electrical discharge machining) being somehow better than hammers cut with a mill. Malarky! That's just a bunch of hype to sell you a hammer!

What difference does it make if the part is cut by a caveman with a piece of flint as long as the tolerances are rigidly maintained? Does pie taste better if it's cut with a sterling silver knife or with a plastic one? Gimme a break!

No matter which Commander hammer you select, we suggest a gunsmith fit any hammer. Don't fall for that "instant drop-in trigger job" stuff either; take it to a qualified gunsmith.

The advantages of a Commander hammer are covered elsewhere.

E-Z Loader

One of those "better mousetrap" ideas that work, the E-Z Loader is a plastic, blue or stainless steel funnel that attaches to the bottom of the Colt frame to make loading easier. It can be used in place of funneling the magazine well, but it is better used in conjunction with a beveled magazine well. In that case, you can use a file to shape the E-Z Loader to the beveling.

The chances of fumbling a reload are greatly reduced with an E-Z Loader because there is so much more area to hit. The E-Z Loader attaches under the grips and does no damage to the gun. It can be easily removed and is inexpensive besides.

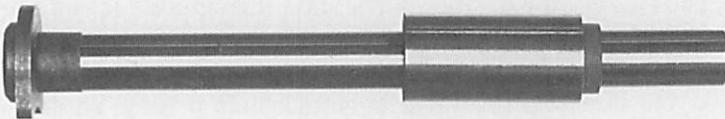
Barrel Wrenches

A good tight competition bushing is going to require a barrel wrench to get it out. Some are made of steel, some of plastic. They're all about the same, and any .45 owner should have one. Or two.

Recoil Spring Guide Rods

These are available in either stainless or carbon steel from several manufacturers. The rods are available in either one-piece rods or two-piece rods that screw together.

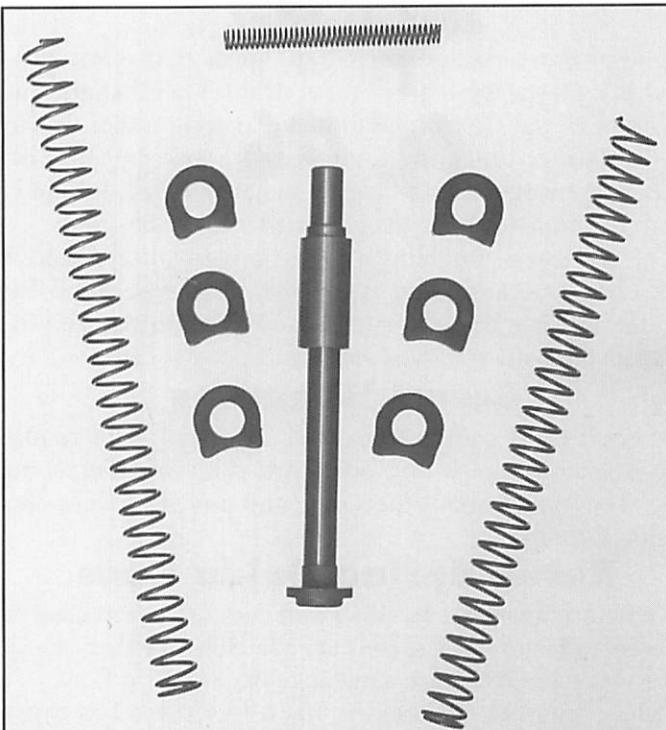
It has been our experience that a two-piece rod must be made out of stainless steel or it will have a tendency to loosen under recoil. In a stainless rod, the binding effect of stainless steel works to your benefit, locking the threads tight.



A full length recoil spring guide rod serves to keep the gun cycling consistently, which gives you greater reliability.

The one-piece rod is probably the best to use in a standard-sized gun, with no danger of anything coming apart.

Guide rods are a functional item. They improve reliability and usually improve accuracy slightly—although they're rarely billed as an aid to accuracy—by keeping everything operating the same way every time.



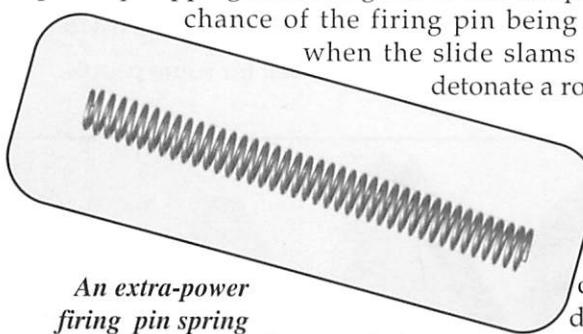
Wilson's sells a recoil guide rod kit with a supply of SHOK-BUFF™ recoil absorbers, firing pin and recoil springs and a guide rod.

Boland Square Wire Recoil Spring

Jim Boland in California makes a recoil spring using square wire, which is a progressive rate spring. That means that the spring has quite a bit of tension while the gun is closed, but it gradually gets lighter as the slide comes back. A normal spring will stack up as the slide goes back. The net result is that you can run a little bit heavier spring to guarantee each round chambers, but still get good ejection.

Heavy Duty Firing Pin Spring

Heavy duty or extra power firing pin springs are a very worthwhile item. The springs decrease the chance of the firing pin stop slipping out of its grooves and completely eliminate the chance of the firing pin being jammed forward when the slide slams home, which can detonate a round.



An extra-power firing pin spring can save a lot of grief. chance of the gun firing than with a stock light spring. We have found that there are never ignition problems with a heavy firing pin spring, even with extremely light mainsprings, such as the type supplied in Gold Cups.

While some of the modifications and accessories seem aimed at curing farfetched problems, it's worth remembering that combat shooting has resulted in a drastic increase in the number of rounds fired by the shooter. Just a few years ago, gunmakers figured that the average shooter would only fire 2,000 rounds in the entire life of the gun. For combat shooters, that's a month's shooting—or less.

The more you shoot, the more likely you are to encounter problems that for all intents and purposes didn't exist ten years ago. Remember Murphy's Law: Whatever can go wrong, will.

Advantage Grip System

This is a real relic from the past before the new generation of compensators, led by our advanced new dual-port Super

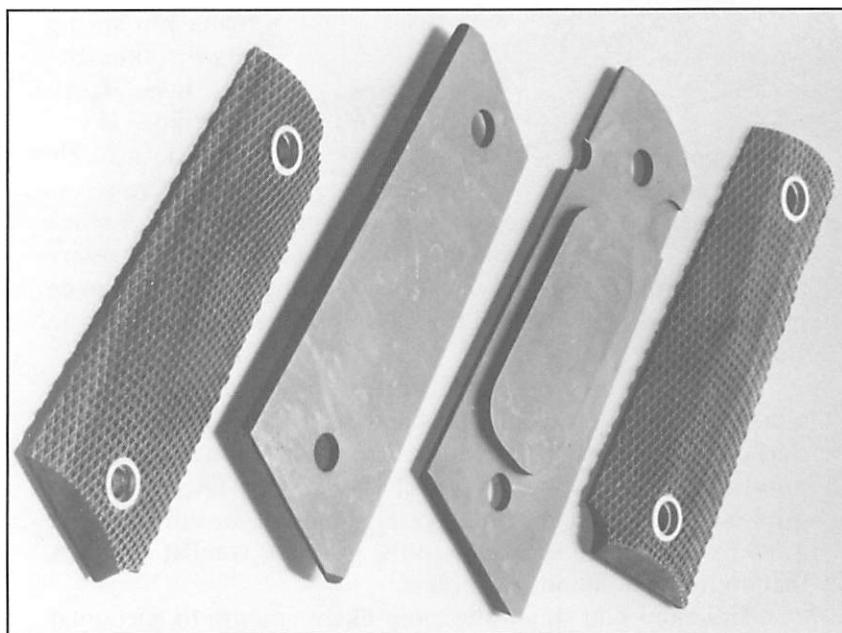
A heavy duty firing pin spring also makes the .45 less drop-sensitive—if you drop it muzzle down, there's less

Grade, proved that technology can take great strides.

Essentially just a set of weighted grips, the Breskovich Advantage Grip System was popularized by Mickey Fowler on his Bianchi-winning .45 auto. This pretty well gives you an idea of the antiquity of the gadget because there hasn't been an iron sighted .45 pistol in the Bianchi Cup winner's circle for a good while, a full decade to be exact.

The system is a couple of metal slabs that bolt under each grip panel and increases the overall weight of the gun by approximately seven ounces. Of course, any weight you add to the gun translates directly into less felt recoil.

The disadvantage is that they make the grips somewhat fatter, and the system doesn't work with Pachmayr grips at all. It is an effective recoil reducing device, and special thinned wood grips are available. Obviously, they work well for some people.



More effective compensators and lighter recoiling cartridges like the 9x21 and .38 Super have rendered such a primitive recoil-reducer as weighted grip panels obsolete. Oddly enough, however, the new hotrod cartridges could benefit from Breskovich steel panels to prevent injury to the shooter in the event of a blown case!

Reduced Power Mainsprings

A lot of shooters go to Gold Cup mainsprings or 18 to 19 pound mainsprings to get a little lighter trigger pull and let the gun cycle a little easier.

With a lighter mainspring, the whole gun doesn't jar when the hammer hits. The stock mainspring, which is 21 to 22 pounds, really slams the gun when the hammer hits home. A .45 is very tolerant to mainspring weight; a 16 pound mainspring will still have reliable ignition, even with a heavy duty firing pin spring. I use reduced power mainsprings in all my guns and never have had a misfire.

The firing mechanism of a .45 Colt is such a drastic overkill that you can weaken the mainspring by 30 percent and still not harm the reliability.

Wilson Checkered Front strap

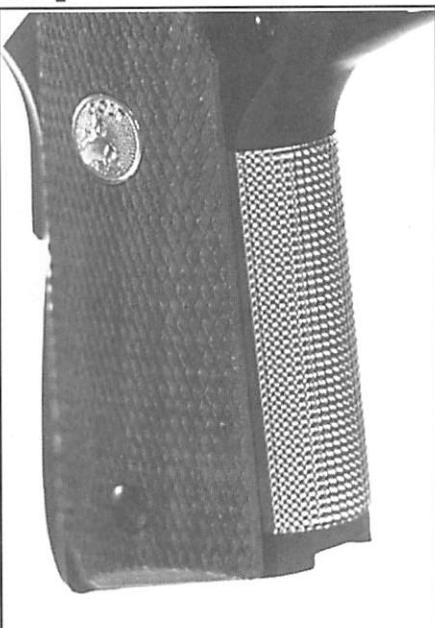
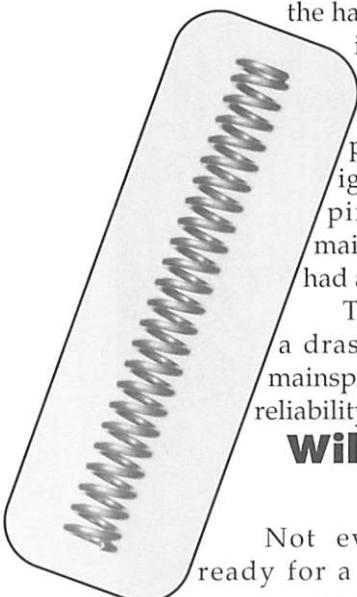
Not everyone is ready for a full-house combat pistol with a hand-cut checkered front strap.

A lighter mainspring is common on competition combat pistols.

This time-consuming option takes many skilled hours to do right, and lots of shooters don't want to spend that sort of serious money.

Enter the Wilson Combat checkered front strap, an all-metal add-on part that gives you the secure feeling of handcut checkering at a fraction of the price.

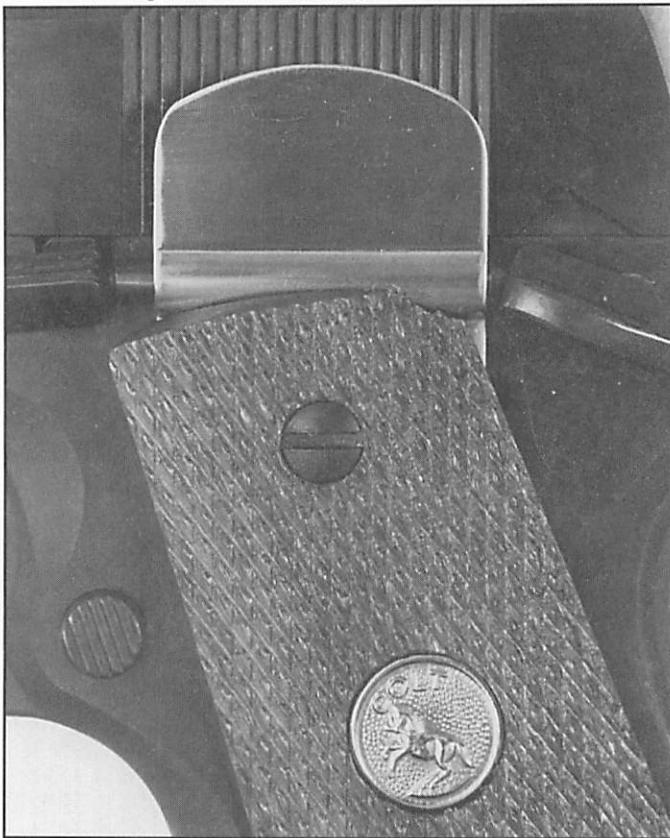
The Wilson Combat checkered front strap requires no modification to your frame and it installs easily in only minutes with a screwdriver.



Thumb Guards

One of the more useful accessories to come along is the thumb guard. The thumb guard is designed to prevent the slide from short-cycling if your strong-hand thumb rubs against it during recoil.

With the lighter recoil springs favored today with the .38

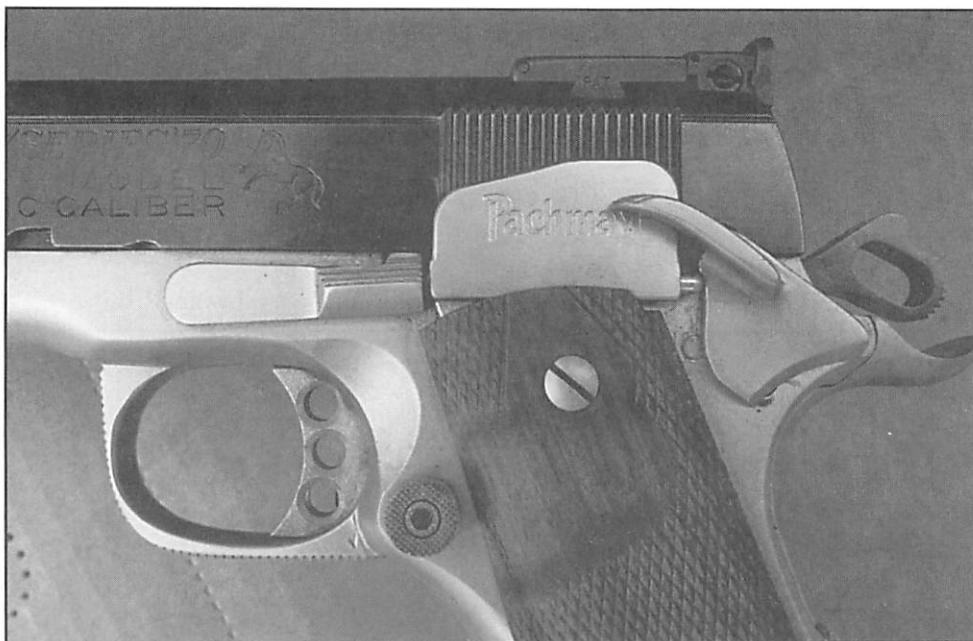


The Wilson thumb guard is easily installed, No gunsmith required!

Super and .40 S&W comp guns, the slightest pressure on the slide can retard its motion and cause a jam. Not good!

The thumb guard prevents this sort of problem. Several good ones are on the market, probably the most prominent being the Wilson and Pachmayr.

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Pachmayr thumb guard as fitted by Steve Nastoff (above) and Jim Garthwaite (below). Jim adds the two hex screws for added strength.



Range Bags

Today's competition shooter has such a wide array of combat shooting accessories available that he needs something to carry them in! There are several "range bags" designed for just this purpose.

The Wilson range bag is made of ballistic nylon and comes in black or royal blue with our distinctive Wilson Combat™ logo emblazoned on the sides.

Our deluxe bag is royal blue in color and was designed by



Frank Brownell and I. It comes with a padded shoulder strap, three zippered outer pockets, one removable double padded pistol pouch capable of holding two large handguns, and two more removable pistol pouches with elastic retainers for up to eight magazines each.

The interior of the Wilson Deluxe range bag has two zippered compartments with three large, rigid, open compartments. The entire interior section is attached to the bottom with Velcro™ and lifts out for convenience. The Deluxe range bag measures 18x12x12 inches.

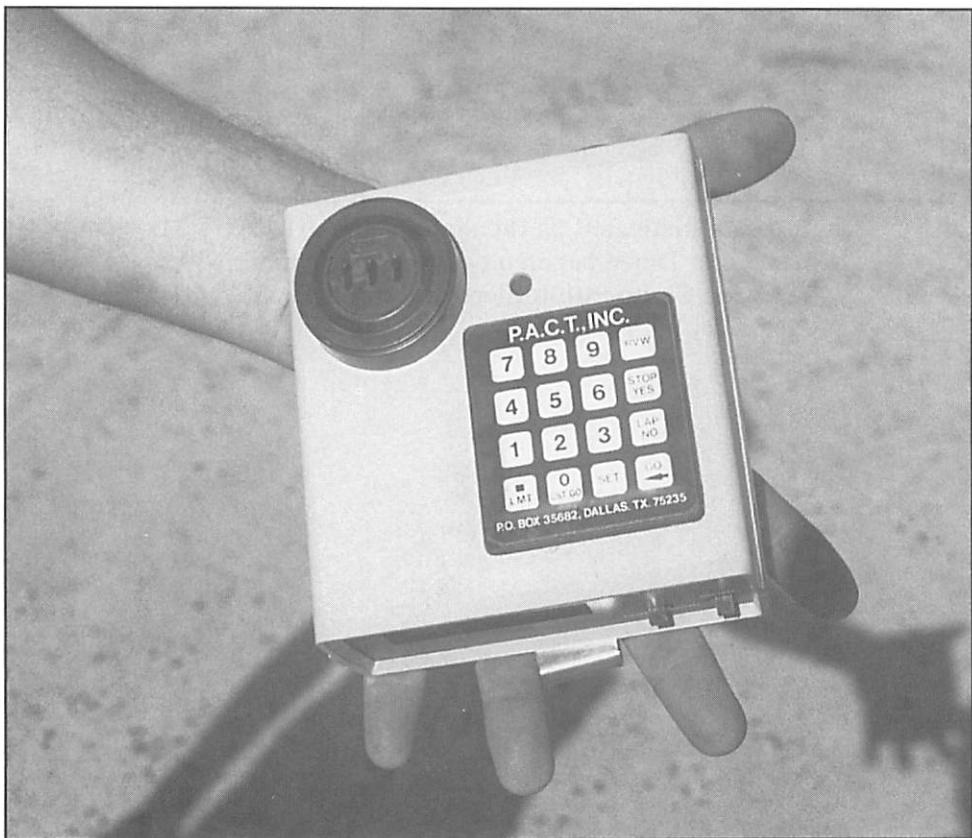
The Wilson Combat™ Shootist range bag is also made of

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ballistic nylon with two padded pocket outer pouches to accommodate two large handguns. There are three zippered outer pockets, three large inner compartments and two inner padded pistol pouches with eight elastic magazine holders. The Shootist bag measures 20x12x14 inches in black only with the silver Wilson logo.

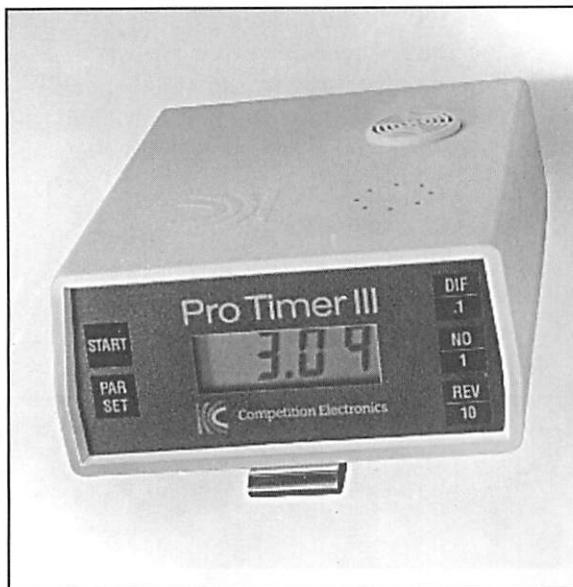
Electronic Timers

In the old days we used stop plates and stop watches to keep track of a competitor's time, but in 1982 Ronin Colman of Dallas, Texas, introduced the first electronic timer that actually *heard* the gunshots!



Before the introduction of Ronin's PACT timer, the best we had was a fixed-time keeper from Bill Rogers that was pretty good for Bianchi Cup events but not much use for IPSC. The PACT timer, however, changed all that.

BILL WILSON



The purpose of a timer—other than being the only fair way to score a match—is to allow a shooter to accurately monitor his shooting skills. You use a target to *where* your shots go, you need a timer to see *when* your shots go.

Ron Baily of Competition Electronics entered the market with his line of Pro-Shot and Pro-Timer units that

aren't as sophisticated as the state-of-the-art PACT Mk. III Championship Timer, but aren't as expensive either!

Between Competition Electronics and PACT, there is a timer for every budget.

Holsters and Leathergoods

While holsters aren't really accessories, many pistolsmiths—including us—carry a stock of them. For our purposes, we'll only look at two types of holsters: competition and concealed carry for self-defense.

For a day-in, day-out carry holster, the Pro Line "belt scabbard" is one of the best. Its design is technically known as a "high ride pancake" and its advantages are that it is small, compact and keeps the gun very close to your body. It is extremely fast, too.

Greg Kramer of Pro Line makes up a Wilson version which completely protects the rear sight, even a Bo-Mar.

I have tried a number of different holsters for my carry gun, a Colt Lightweight Commander Model modified for self-defense use by, naturally, Wilson's Gun Shop. I use the belt scabbard when my clothing includes an outer garment—light jacket or loose, untucked shirt—because it is the most comfortable carry rig I've ever tried.

However, for hotter weather when it's not really feasible to wear a jacket, it's better go with the venerable Milt Sparks Summer Special, an inside the pants (ITP) holster, or the Pro Line ITP Style #2. They are also good for regular, daily carry even in cooler weather, but it's been my experience that an ITP is quite a bit less comfortable than a rig that rides on the belt. However, the ITP design is more concealable.

For competition, the choice narrows down to really only

THE COMBAT AUTOMATIC



Greg Kramer's "belt scabbard" (above) is my favorite for day-in, day-out wear . However, when concealability is a real concern, the "inside the pants" (below) style is hard to beat.

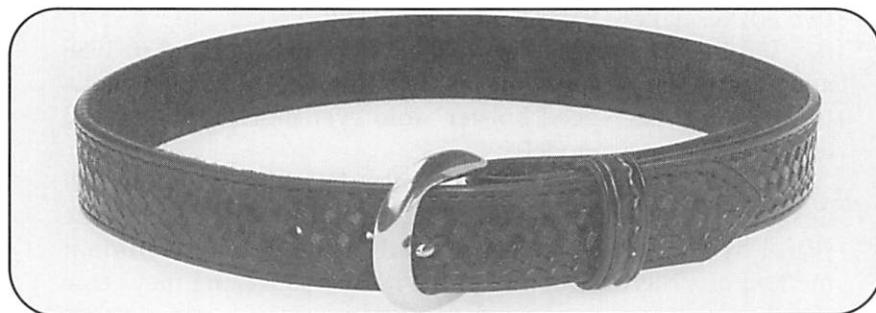


BILL WILSON



Safariland's new Final Option is available on a special order basis for more exotic guns like this Springfield Armory P-9 in 9x21 caliber fitted with a Tasco "big dot" sight. The thermo-laminate process invented by Bill Rogers and sold to Safariland is easily adapted to fitting unusually shaped pistols like this one.

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A good strong belt is necessary for taking the abuse of "slapping leather" hard and fast in speed shooting. The weight of a fully loaded rig with six mags, gun and holster is also a factor. The Safariland "Gunfighter" is an excellent choice.



The Final Option from Safariland incorporates an ingenious trigger guard locking device that retains the gun tightly against accidentally dropping it, but at the same time releases the pistol quickly and effortlessly on the draw.

BILL WILSON

two holstermakers, Safariland or Ernie Hill.

Bill Rogers sold his Roger Holster Co. to Safariland in 1986 and since then he has continued to innovate that marvelous thing called the "speed holster" into ever more sophisticated and advanced new models.

Today's hot set-up is the Safariland Final Option that Bill designed with a unique new "locking block" that secures the pistol by the trigger guard instead of the old conventional method of a mere friction fit of the holster squeezing the whole gun.

Bill pioneered the Thermo-Laminate process for holster design in which a sturdy shell of space-age plastic is molded to permanently hold the shape of the gun and then the plastic holster body is then sandwiched in high-quality leather.

The resulting product is as attractive as it is functional. The holster continues to hold its shape no matter how many times you land on top of it diving into prone!

Ernie Hill's Fas-Trac is a popular speed holster with a unique muzzle locking device for a secure gun yet fast draw.



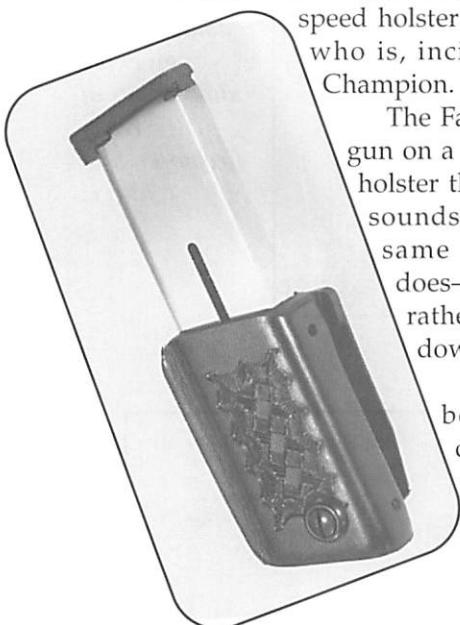
Ernie Hill Speed Leather

Ernie Hill Speed Leather takes a more conventional approach in that his holsters are primarily made out of select top-grain cowhide, but Hill holsters are famous for their solid steel linings to retain strength and shape in much the same manner that Safariland uses plastic.

The Ernie Hill Fas-Trac is, at this writing, the state-of-the-art speed holster from this Arizona leathermaker who is, incidentally, a World Fast Draw Champion.

The Fas-Trac works by positioning the gun on a plastic stud in the bottom of the holster that fits into the pistol's barrel. It sounds awkward, but it achieves the same thing that the Final Option does— retaining the gun by a device rather than by friction, which slows down the draw.

Both holsters are good and both have their share of championships won with them. Both are about equal in price.

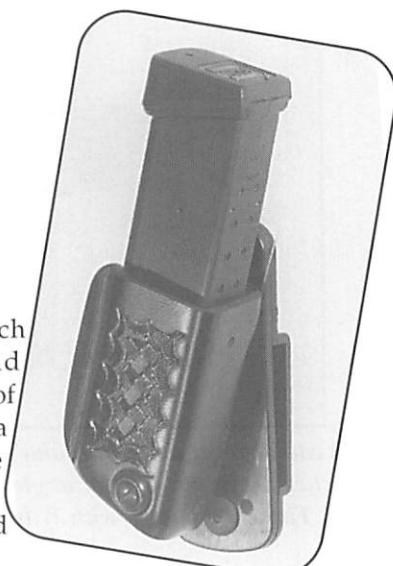


The Idaho reloader is available for most popular competition magazines including the 1911 (above) and the Glock (right).

Idaho Reoader

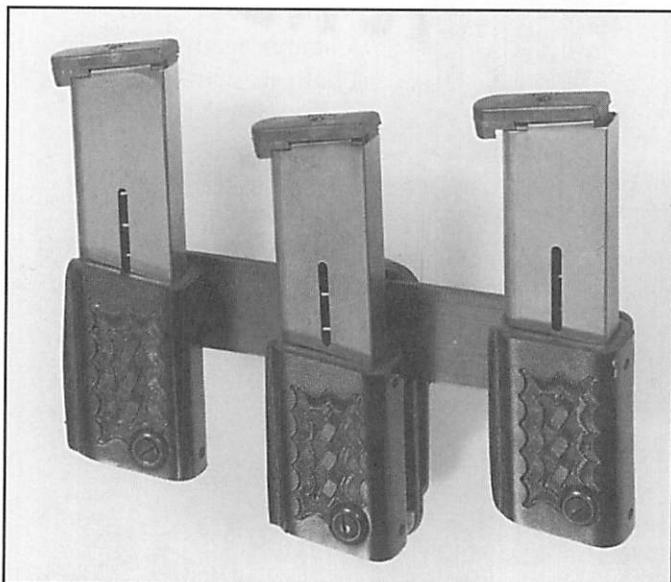
This single magazine pouch designed by Bill Rogers and marketed by Safariland is made of thermoplastic and has achieved a widespread acceptance on the IPSC circuit in a short time.

The Idaho reloader will hold



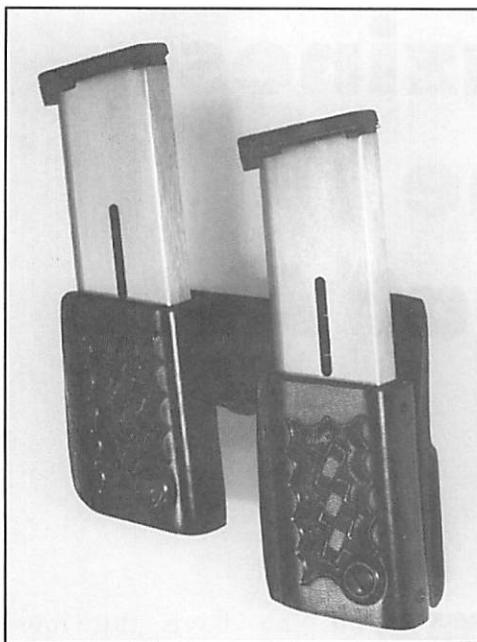


An Idaho reloader mounted on the front of a Safariland double pouch gives the shooter lots of ready firepower... in a hurry!



You can also get a trio of Idaho's mounted on a metal rail. All three pouches are adjustable for angle and on the support bar as well the rake. These are shown with Wilson/Rogers .45 magazines.

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A pair of Idaho's on a Safariland adjustable bar. Needless to say, a setup like this is strictly for competition shooting and would look rather silly on the street.

However, the position of the Loader makes a big difference here. If it is worn under the belly button, right next to the belt buckle, then it seems to protrude much better than when worn back behind the hip.

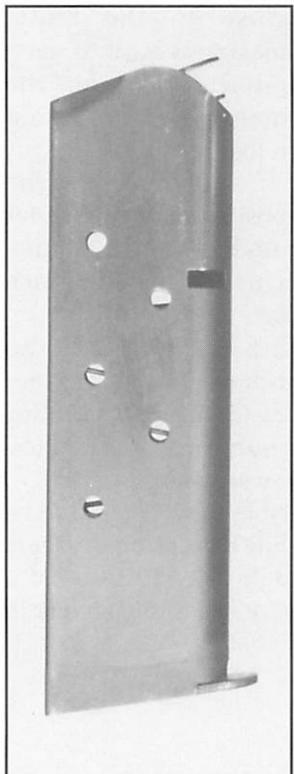
You see a lot of combinations, with one or two Idaho Reloaders combined with a more standard two magazine-pouch. Some shooters keep several extra Idaho Reloaders for courses requiring an inordinately large number of magazines. One of their biggest advantages is that they are inexpensive.

In addition, an Idaho loader is available from Safariland as the "Triple Pouch" that I designed for Bill Rogers many years ago. The "Triple Pouch" mounts an Idaho on the front of a standard double magazine-pouch for a very fast and convenient three magazine set-up.

the magazine with the bullets up or down, and can be adjusted for cant for people who prefer the magazine positioned at an angle.

The Idaho Reloader is an ideal way to carry a magazine for off-duty, because it holds the magazine close to the body. I'm still not convinced that it's an ideal situation for competition, because on some people it keeps the magazine too close to the body, making it hard to get a good grip on the magazine for a fast reload.

Magazines for the Combat Auto



You can have the most perfectly tuned .45 in the world, with the best ammunition money can buy, but if the magazines are junk, the damn thing just won't work.

It's really amazing how many people are willing to put a lot of money into the gun, but won't buy decent magazines. They don't seem to realize that any piece of junk magazine just won't cut it.

Usually in life you get what you pay for. In magazines, though, that isn't always true. There are some excellent magazines on the market that aren't very expensive and some outrageously expensive ones that aren't any good.

A Colt magazine usually works. They're not terribly durable, but they do generally work when you get them. You'll get pretty good service from a Colt magazine, but don't expect it to

THE COMBAT AUTOMATIC

last as long as some of the others on the market.

There are some GI replacement magazines on the market that are surprisingly good. Those actually made to MilSpecs are very good quality magazines. Be careful here, though.

GI Magazines

There are some awful magazines on the market being billed as "GI" or "Military Spec." The worst thing you can do is go to a gun show and buy a "GI" magazine, because there is no way of knowing what you're going to get.

The supply of actual military surplus magazines has been dried up for years. You're not going to get real GI surplus magazines, which if you could would be great, since GI magazines are very good.

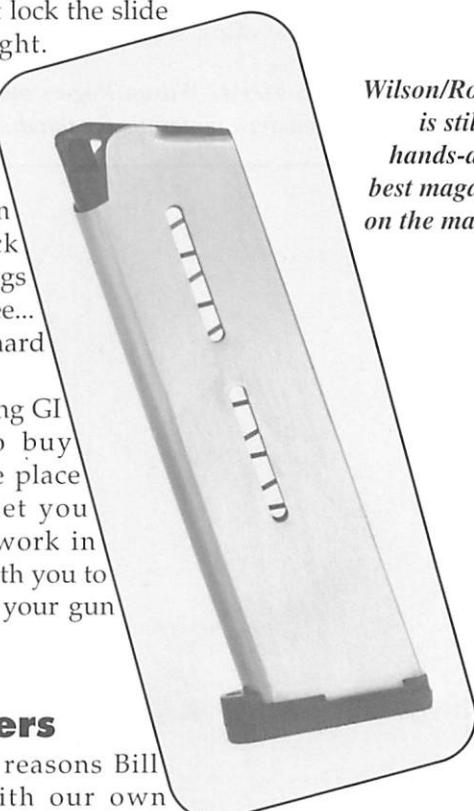
If you're lucky, what you'll get is actual GI magazines that were rejects. If you're lucky...

Chances are you'll get some aftermarket piece of junk that won't feed, won't eject, won't lock the slide back, won't do anything right.

You see, when you go to a gun show you'll run into a bunch of guys who bought some magazines, three for a ten bucks, at the previous gun show and now they're back trying to pawn the darn things off on the first sucker they see... like you! They learned the hard way; don't you.

A good strategy for buying GI spec magazines is not to buy through the mail unless the place you're buying from will let you return them if they don't work in your gun or take your gun with you to a gun show and try them in your gun before you purchase them.

The Wilson/Rogers is still the hands-down best magazine on the market.



Series 47 Wilson/Rogers

These are some of the reasons Bill Rogers and I came up with our own

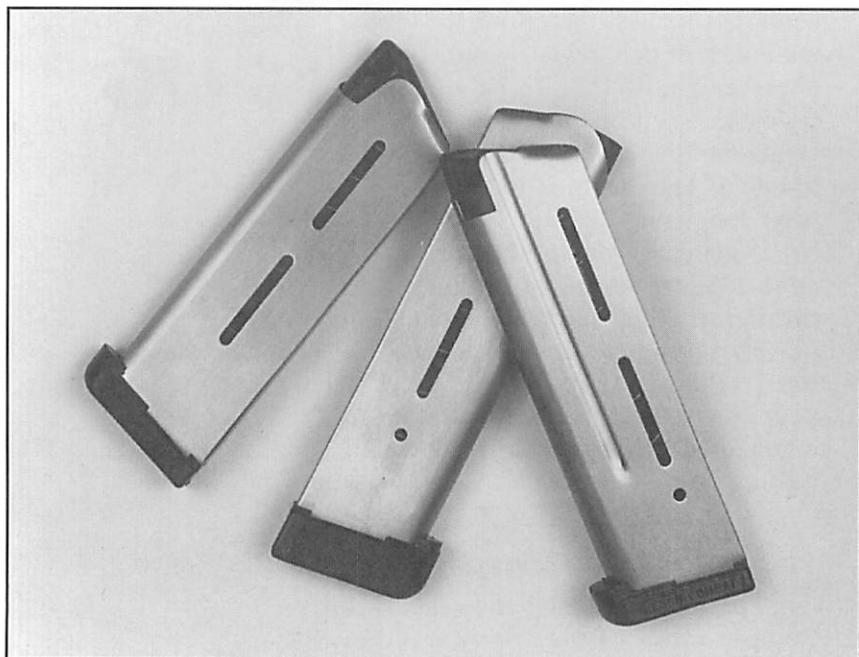
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magazine. We felt there wasn't really a super high quality .45 magazine on the market. Our newly redesigned Series 47 magazine is made of 17-7 stainless alloy with special Wolff high tensile strength, extra-power springs.

The follower is also a new design in our Series 47 magazine made out of DuPont Zytel, a synthetic material that is tough as nails and twice as durable! It is carefully designed to assure positive slide stop operation.

The new Series 47 magazines come with a selection of two base pads, standard and oversize. Both pads are made out of the amazing new material called SuperTuff, a high-strength plastic used by Smith & Wesson in their new Third Generation autopistol grips. The standard pad, intended for duty or self-defense guns, is long enough to guarantee a positive and consistent insertion of a fresh magazine without the danger of pinching a finger when the mag is slammed home. The base pad is .350" thick, which is long enough to assure reliable and smooth reloading while at the same time being unobtrusive so

The new Series 47 Wilson/Rogers magazine incorporates the very latest in modern materials for tough, durable, reliable performance.



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as not to bulge under light clothing.

The competition base pad is a hefty .675" thick, large enough to assure a consistently fast and reliable mag change even with today's breed of X-Large mag funnels that extend below the frame.

The Series 47 magazines are available in standard or extra capacity configurations. A stock .45 magazine capacity is seven rounds, and our extra capacity version holds eight.

Our .38 Super high capacity version adds one to the standard nine to make it a ten-pack.

Our 10mm Series 47 magazine holds eight in the standard version, nine in the extra capacity. Our Officers Model magazine holds six, seven with the high-volume version.

All of the base pads are easily removable to reveal a base plate that can simply be slid off to allow for easy cleaning.

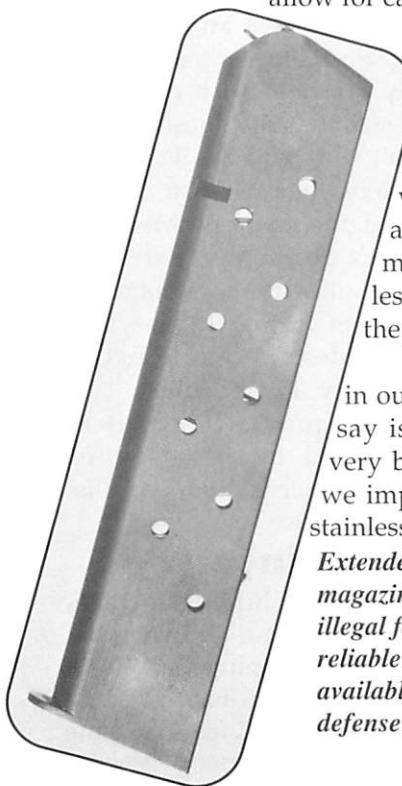
Additionally, the new Series 47 magazine features our improved feed lip configuration to assure long life and virtually prohibit cracked feed lips, a common problem with lesser magazines. The aircraft-grade stainless tube is .027" thick versus .025" for the standard Colt magazine.

There were many factors involved in our new Series 47 design and all I can say is that I truly believed we had the very best magazine on the market... until we improved our original Wilson/Rogers stainless steel magazine with the advanced

Extended 11 round Series 47 design!

magazines are now illegal for IPSC, but reliable ones are still available for self-defense use. A magazine receives a tremendous amount of handling, and with a blued (or even a stainless steel)

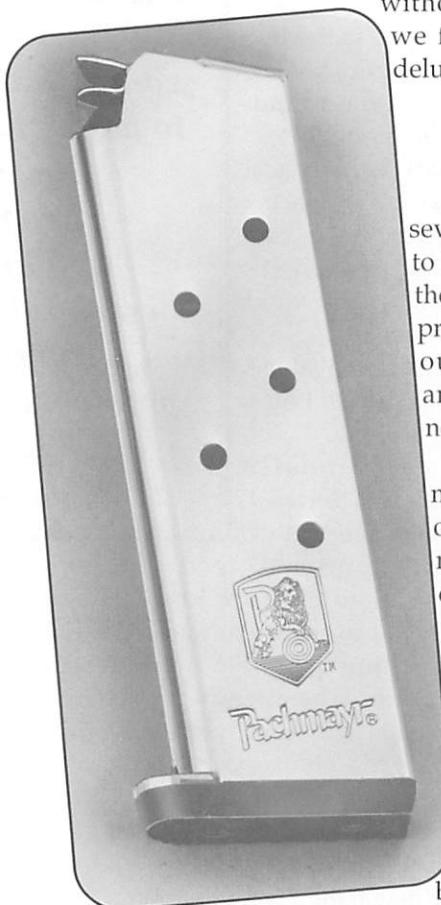
The new Series 47 magazine features our improved feed lip configuration to assure long life and virtually prohibit cracked feed lips, a common problem with lesser magazines.



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magazine, if you don't wipe it down after each shooting, you're likely to come back the next day and find it brown with rust.

We have several of the Wilson/Rogers Series 47 magazines in our shop which we use to test fire every gun that is shipped out. Countless number of rounds has gone through them without any problems at all, and we feel they're state-of-the-art, deluxe magazines.



Pachmayr Magazines

Pachmayr's new stainless seven shot magazine also seems to be of very good quality, but... the Pachmayr magazine is over-priced. It's more expensive than our new Series 47 magazine and, if I do say so myself, not nearly as good.

Sometimes an extended magazine comes in handy. The only problem with extended magazines is that most of them don't work and the IPSC rules prohibit their use! The 11-shot magazine made by Mec-Gar, works excellently. Extended magazines are now outlawed for IPSC competition, which includes the Eagle extra-capacity .45 magazines.

A good strategy is to buy good quality GI-type replacement magazines for practice and reserve the top-of-the-line magazines for defense and competition use.

McCormick Magazines

Two-time Steel Challenge champion Chip McCormick bought Charlie Kelsey's patent for a magazine follower that Charlie had marketed under his Devel Corp. brandname.

Today Chip has extended (pardon the pun) his magazine line to include .38 Super and 10mm magazines featuring the

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line to include .38 Super and 10mm magazines featuring the Devel follower. McCormick magazines are available in blue and stainless, with or without base pads.

Magazine Base Pads

Speaking of base pads, as we mentioned earlier, everybody should have them. There are numerous different types on the market—glue-on, screw-on, rubber, composite material, plastic and many come in flaming bright Day-Glo colors.

The glue-on kind are fine as long as the proper glue is used to attach the pad to the magazine. Most people try to use one of the "super" glues, which is fine for things that aren't flexible. When the base pad flexes just a little, it breaks the bond.

Base pads are best installed with contact cement or a glue used to repair shoe soles. That will keep the pad and magazine together forever.

Be careful to make sure that the magazine base has been completely degreased before applying the glue.

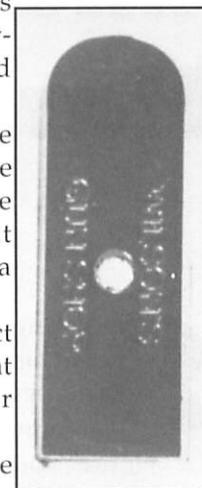
The screw-on type, like Pachmayr makes, is an even more secure way of installing the pads. Leather base pads are available, but they don't work very well. They can be securely glued on, but the leather itself will peel away.

To be useful, a base pad needs to be at least a quarter-inch in thickness—the thinner pads don't help you much. If you've got an E-Z Loader or S&A magazine funnel on your gun, make sure your base pads are a little thicker than the loader.

The latest trend is brightly colored base pads and John Ricco at CP Bullets makes a very good pad that is available in a variety of Day-Glo colors. If you want to add weight to your gun, there is the BAT pad made out of brass.

A San Diego based company called CMPI makes a line of aluminum and brass base pads that slip right on the bottom of the Wilson/Rogers old style and new Series 47 magazines.

All of these new pads are fairly durable and seem to offer a splash of color to the fashion-conscious shooter.



BILL WILSON

Ammunition and Handloading

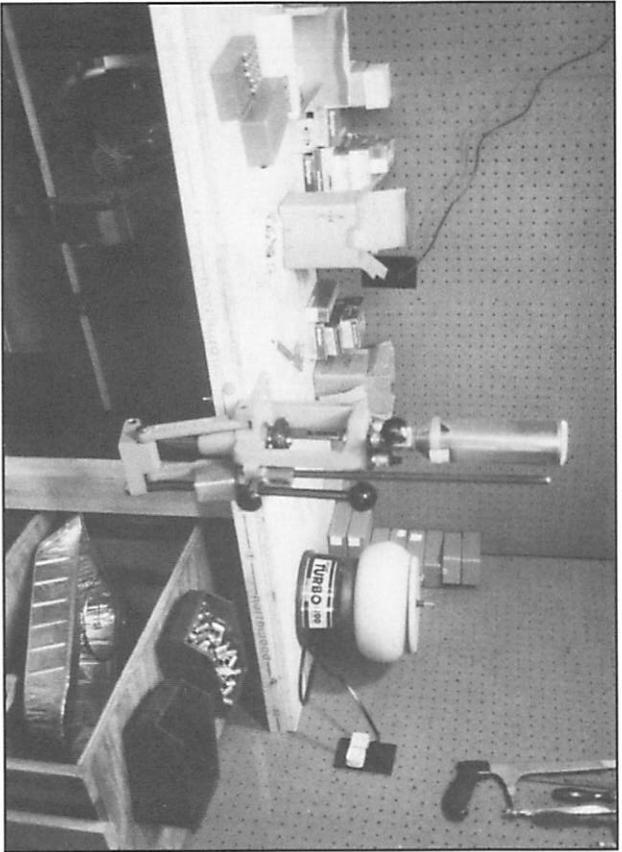
Selecting ammunition for the combat automatic is no easy task. The shooter must determine what his needs and requirements are and then find the types of ammunition to best fill his needs.

Notice I said types, as in more than one. The shooter who is using his combat pistol for recreational shooting, competition shooting and self-protection needs several different loads.

For self-defense purposes, the majority of authorities agree that only factory loaded ammunition should be used for civil and criminal liability reasons. If you shoot Joe Career Criminal with your latest thermonuclear handload, specially concocted to cause the worst possible wound, then you can and probably will be sued by the bad guy's widow.

You don't need that sort of grief in your life!

**WARNING! APPROACH HANDLOADING WITH CARE!
WE CANNOT BE RESPONSIBLE FOR RESULTS
OBTAINED WITH ANY RELOADING DATA IN THIS
BOOK DUE TO THE INHERENT VARIATIONS IN
RELOADING COMPONENTS AND SKILL OF
INDIVIDUAL HANDLOADERS. EACH GUN IS
DIFFERENT, SO WORK YOUR WAY UP SLOWLY TO ANY
LOAD APPROACHING A MAXIMUM CHARGE AS
RECOMMENDED IN A BOOK OF HANDLOADING
DATA FROM A RELOADING COMPONENT
MANUFACTURER.**



A basic reloading setup needn't take up much room in the garage. Thousands upon millions of rounds have been made on setups just like this, a Dillon 450 and plenty of brass to spare!

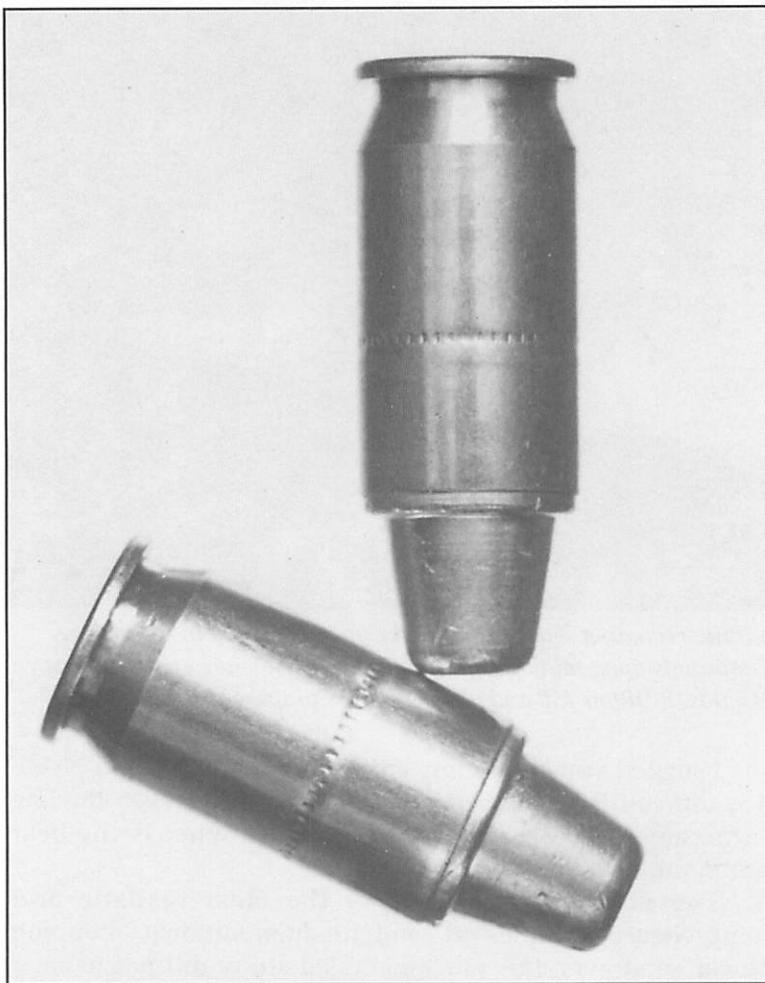
I suggest you buy factory ammo for your nightstand pistol. It is difficult to recommend specific loads when even the law enforcement community can't agree on what is the best ammunition for defensive handguns.

The FBI completed one of the most realistic and comprehensive studies on handgun ammunition's "stopping power" and even this much-heralded study did not name a "winner." The FBI reported that several loads all performed well. They ended up picking a specially down-loaded 10mm for their new service load, however, their report showed many other good loadings in other calibers.

Basically, the FBI study rated hollowpoints over hardball, big calibers over small, and high velocity over low.

I guess that's not earthshattering news, but that's only a broad generalization. Specifically, here is how the FBI rated some of the more popular self-defense loads. The percentages are based on the results of eight separate shooting tests that the FBI determined best represent the conditions of a real-life gunfight.

BILL WILSON



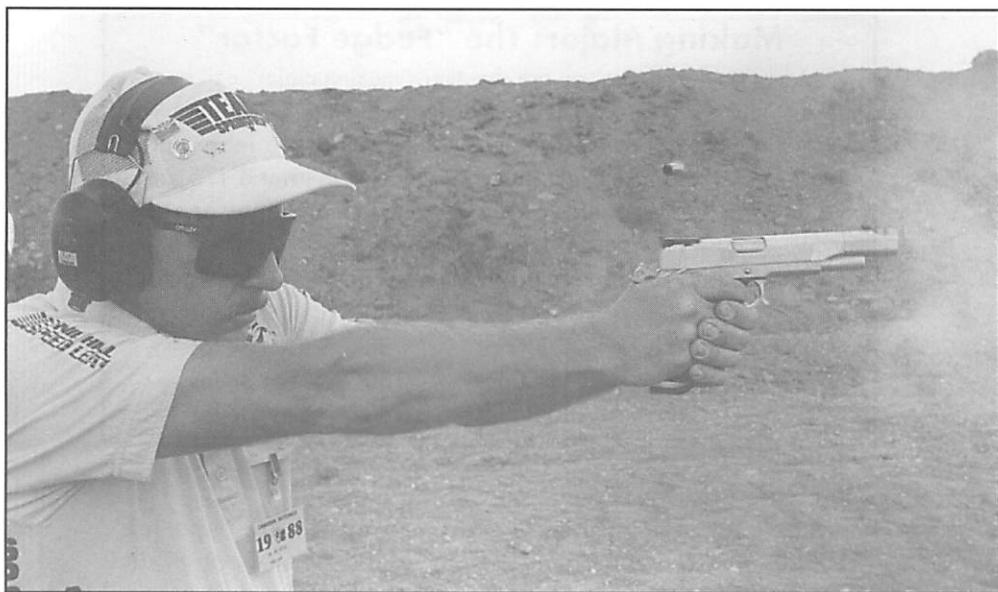
A good .45 ACP handload using an H&G #68 cast lead bullet. This semi-wadcutter design feeds reliably and shoots accurately.

Reliability Comes First

Most combat shooters stay away from factory ammunition for two reasons: It's expensive, and high quality handloads can sometimes out-perform factory ammo.

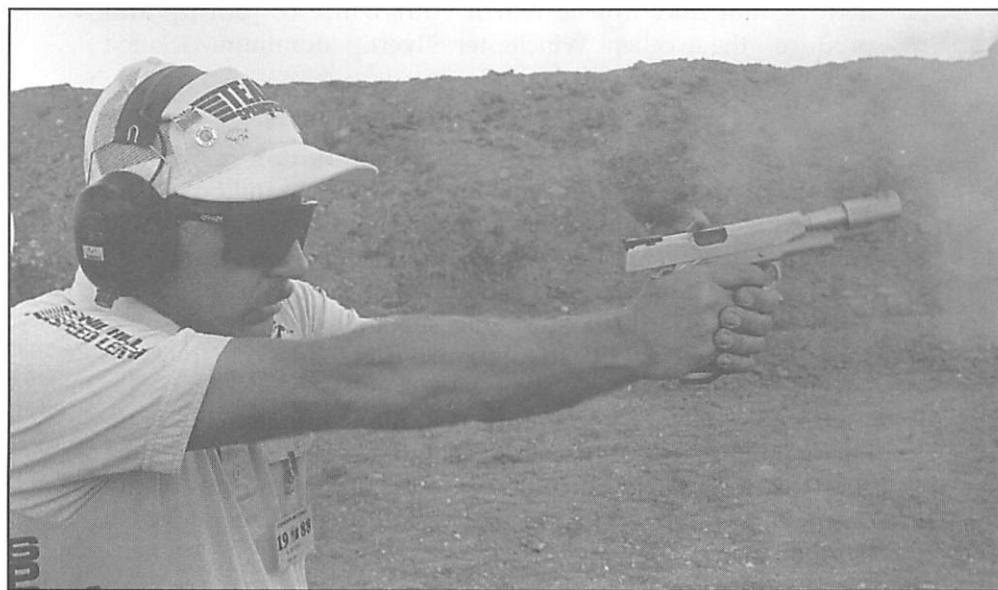
At approximately \$20 per box of 50 rounds, factory .45 ammunition could quickly turn practical shooting into a rich person's sport. Consequently, handloads are the order of the

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A good handload in .38 Super is the easiest cartridge to control when loaded to make major in IPSC. With a 150 gr. bullet, muzzle jump is minimal, like Jake Kempton from Arizona illustrates. I believe that's a Guy Hammond custom pistol.

Dave Anderson photos



Making Major: The "Fudge Factor"

Depending on the caliber you are shooting, "making major" can be vary in how sensitive your load is to velocity fluctuation. The lighter your bullet, the more dependent is your load on velocity to make major. Always load with an adequate "fudge factor" built in (over a 175 factor) to allow you to make major even if weather conditions or range conditions cause your loads to lose velocity.

Caliber	Bullet Weight	Velocity	Power Factor	"Fudge Factor"
.45 ACP	200 gr.	900 fps	180	25 fps
.38 Super	150 gr.	1,200 fps	180	34 fps
.40 S&W	150 gr.	1,200 fps	180	34 fps
9x21	135 gr.	1,333 fps	180	37 fps

day for practice and competition. There are, however, some very good reasons for shooting factory ammunition.

The first is reliability. Factory ammunition, especially hardball, is extremely reliable. In fact, many IPSC shooters stick to factory ammo for their self-defense guns for that reason. Another reason is accuracy.

Some factory rounds have been refined to the point that even the best handloader can only hope to match their accuracy in target guns.

Finally, there are some specialized loads produced by the factory that may not be worth your while to tool up and produce—the excellent Winchester Silvertip aluminum-jacketed .45 hollowpoint is a good example.

.45 ACP Ammunition

There is no shortage of factory ammunition for the .45 automatic. Military surplus and ammo loaded to military specs are available at almost every gunshop. Bullet weights of 230 grain (hardball weight), 200 grain and 185 grains are common.

The most consistent and accurate hardball available is the Federal Match Hardball. Most guns shoot it extremely well, and some well-heeled IPSC shooters use this load exclusively in matches.

In other factory loads of interest, the Remington 185 grain hollowpoint is one of the most accurate loads available for the .45. It is, in fact, the most accurate factory round out of my competition guns. A close second would be the Federal Match hardball load.

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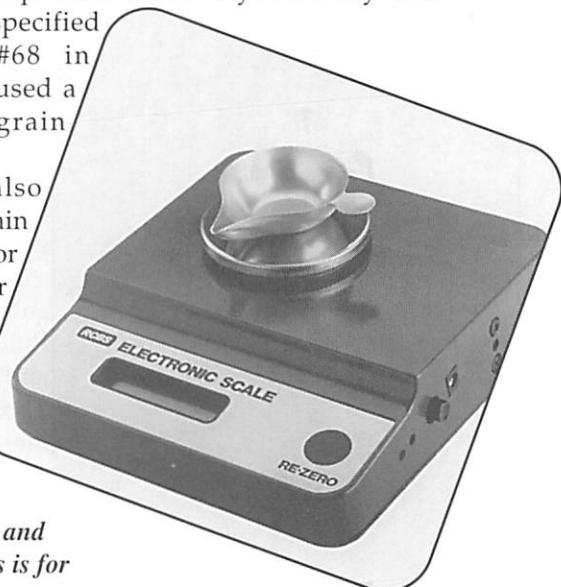
Perhaps the most popular bullet to emerge in IPSC competition for the .45 has been the Hensley and Gibbs 200 grain semi-wadcutter, cast hard. The H&G #68 (and its imitators) has a long nose and feeds very reliably in guns with even a mild throating job.

Of the 15 top IPSC competitors we surveyed for my first book, *The Combat .45*, 10 specified they used the H&G #68 in competition. Four others used a similarly designed 200 grain semi-wadcutter.

Hensley and Gibbs also makes a mold for a 225 grain roundnose bullet, the #34, for people who prefer roundnose bullets.

Another very popular bullet is the Hornady 200 grain CT. While this is an extremely

An electronic scale like this one from RCBS is convenient and nice... but it's expensive! This is for the guy who has everything!



accurate bullet, many guns— even heavily throated match guns— will not feed this bullet. I do not recommend the use of the Hornady CT for this reason.

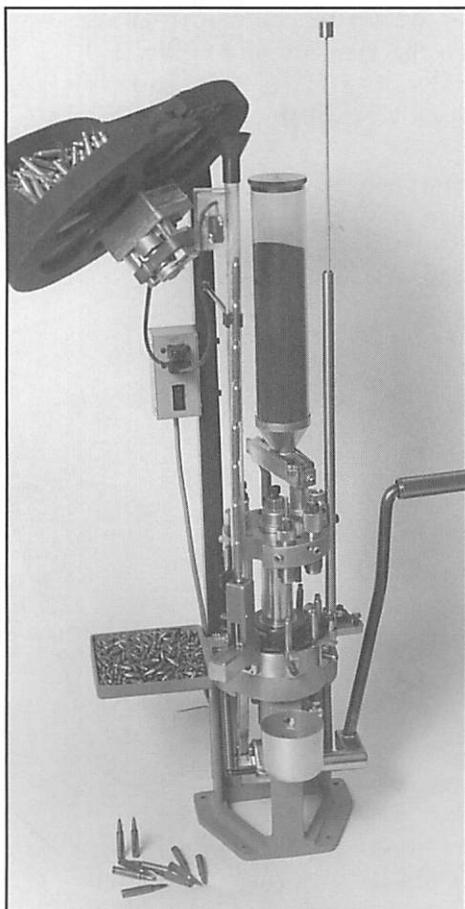
Before you depend on this bullet in a match, make sure it cycles reliably through your gun with the handloads you'll be using in the match.

For IPSC-type shooting, my pet load is 5.0 grains of Bullseye with a 200 grain H&G #68 bullet, Federal primers and Winchester WCC military brass.

Overall length of the cartridge should be between 1.250" and 1.260".

Taper crimping is a must and has to be done correctly: With a proper taper crimp, the case should measure .469" at the case mouth.

That handload, carefully loaded on a good machine, is the



The Dillon 1000 was once the hottest press going for practical shooting, but the newer Dillon 1050 is better. However, the 1050 cannot handle .308 rifle like the old 1000 can. This is important if you happen to own an M-60!

best single round to shoot in a .45 in my opinion.

For a 230 grain bullet, the load can be reduced to 4.5 grains of Bullseye.

Many practical shooters substitute Winchester's 231 for Bullseye as their main powder, and a few use 700X or Unique. Those four powders can fulfill any need for the .45 ACP.

We have steered clear of 231 because it seems to have a sharper recoil than Bullseye for similar velocity loads. Unique is a good choice, but it's extremely dirty, both for the gun and the shooter.

While some practical shooters recommend shooting one load all the time, I prefer using a reduced load for much of my practice. It's easier on the gun and on the shooter.

The Handloading "Option"

For most of us, though, handloading is the only way to go.

Handloading for pistols is in many ways a different proposition than handloading for rifles. Pistols tend to be a little more forgiving than finely tuned rifles.

The pistol handloader, especially the practical shooter, is looking for one or two loads—practice and match—that shoot well, function flawlessly and that are economical to load.

Unlike the rifle shooter, who might load 100 rounds for a whole hunting season, the practical pistol shooter has to be

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All of these rounds can be used successfully for self-defense and practical shooting competition. Some are better than others depending on your preferences. They are (left to right) 9mm, .38 Super, .40 S&W, .41AE, 10mm, and .45 ACP.

Dave Anderson photo

concerned with loading hundreds of rounds per week! Prior to the rise of practical shooting, progressive reloading machines were relatively unknown, as were individuals who bought bullets in 10,000 piece lots.

Major And Minor

In addition to changing the way people reload, practical shooting has shown which loads work and which loads don't. To qualify for "major" caliber, a cartridge's bullet weight multiplied by its velocity must equal 175.

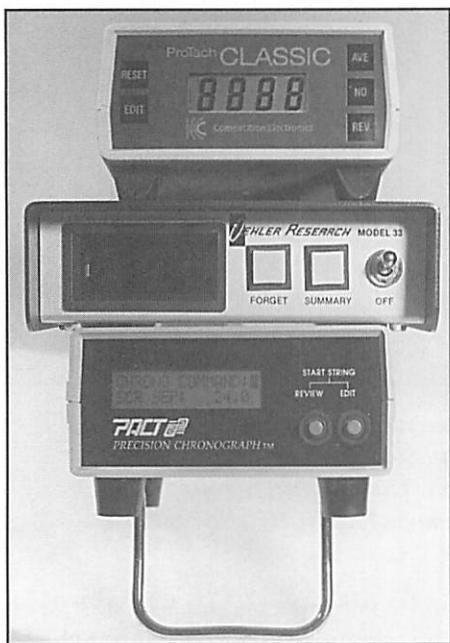
This is a practical point, requiring service ammo instead of superlight target loads. For example, take a 200 grain bullet traveling at 875 fps:

$$200 \times 875 = 175,000 \div 1,000 = 175$$

Bullet Weight x Velocity \div 1,000 = Power Factor

That's major caliber. However, most IPSC shooters use a load that is 25 to 50 fps over minimum factor velocity depending on caliber.

Since in IPSC, a shooter almost always fires two shots—a double tap—recoil becomes an important factor. Lighter bullets produce less recoil, but they also have to be driven faster to meet the power factor.



The only way to be certain of your ammo's power factor is to chronograph it before you go to a match. Three good ones (top to bottom) are the Classic from Competition Electronics, the now-outdated Oehler 33 and the Model 1 from PACT.

Charlie Petty photo

Handloading Presses

The serious practical shooter is almost forced by hard economic necessity to get some kind of progressive or semi-

progressive reloader. A progressive reloader is one that performs a number of operations on a single stroke.

The very best progressive machines, like the old Dillon 1000, the new Dillon 1050 or that great old standby, the Star, all produce a finished round with each pull of the lever. All you have to do is keep setting bullets on top of cases and make sure the powder bin, the primer tube and the case feeder is full.



*Kim Ahrends custom
Commander*

Of course, that kind of convenience comes with a pretty stiff price—around \$1,000 for Dillon 1050, which is the "best buy" in a full - progressive press. That's simply out of

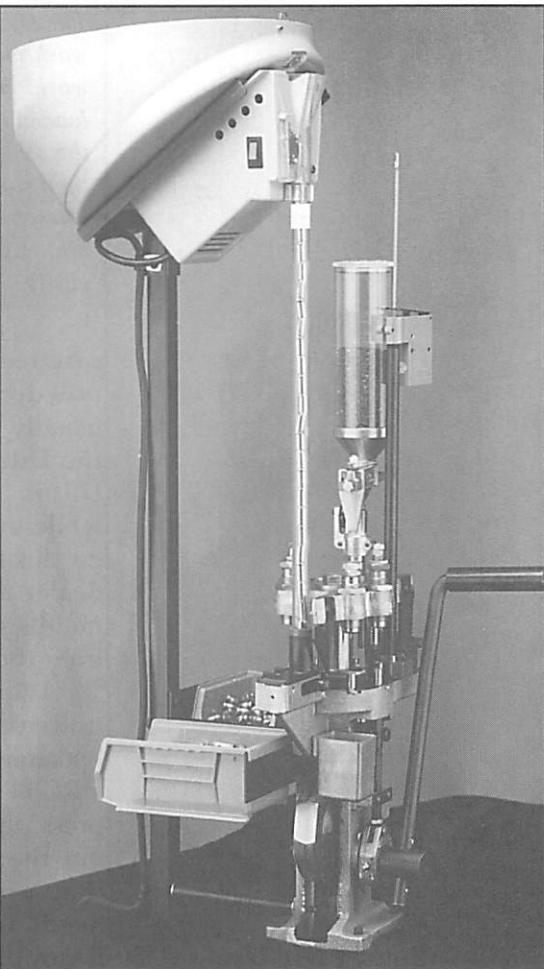
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the question for most shooters.

(However, if you really want a progressive press but can't quite swing the full thousand bucks at one crack, Dillon offers a unique payment plan in which he charges your credit card in three or four payments. Call Dillon Precision at 1-800-421-7632 for more details.)

The next "best buy" for the money in a semi-progressive reloader is the Dillon 550-B, the latest evolution in a longterm series of evolutionary presses from Mike Dillon.

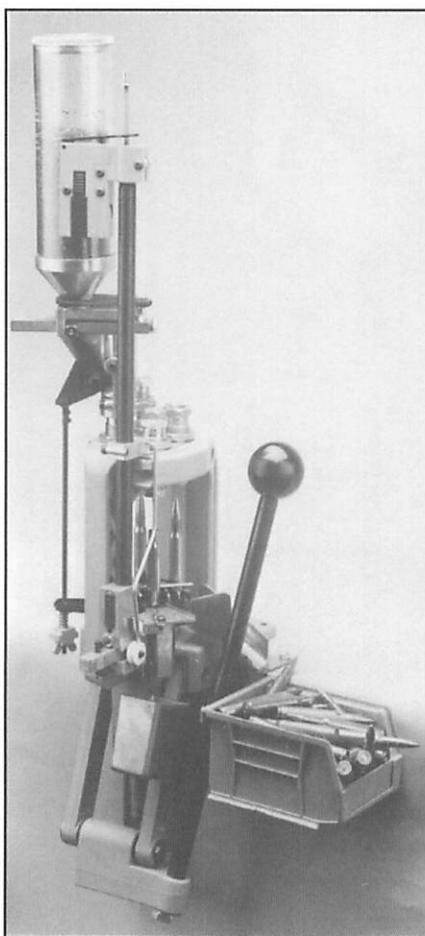
The big



The Dillon 1050 is capable of 1,000 rounds in an hour, but that's just something you'd do to show off. It's better to take a little time and make sure of really good reloads. Taking it easy on the big Dillon machine yields "only" 600 rounds, a hundred every 10 minutes.

Dillon is the way to go if money is no object. It can't make any better ammo than its little brother the 550-B, but it can make it faster.

Some of the biggest selling reloading items these days are the semi-progressive reloaders like the Hornady Pro-7, RCBS Piggy-Back and the Pacific 009. These machines lack automatic



The Dillon 550-B is the workhorse of the IPSC world. More rounds are loaded on this press than all the others combined... and then some! Its interchangeable tool head allows you to switch calibers easily.

case feeders or automatic powder drops. They usually sell for more than the Dillon 550-B because Dillon is factory-direct while these others have to go through a distributor-dealer network with each middleman raking a profit from you.

While all of these are undeniably faster than reloading all your ammo in a RCBS Junior single stage press, they still won't turn out the volume of ammo that a practical shooter needs to stay in trim. A

small Dillon Square Deal or 550-B can produce 400 to 500 rounds an hour, and a good shooter can eat up 500 to 600 rounds a week.

Bulk Buying Of Components

The practical shooter needs to purchase reloading supplies in bulk. Good cast bullets are usually available locally. If not, Bull-X sells excellent bullets, as does E&E Bullets and Atlanta Arms and Ammo.

Your best bet for brass is to look through the pages of a publication like *Shotgun News*. The best .45 brass is either Winchester/Western commercial or WCC stamped military, which is produced by Winchester/Western. Avoid nickel-plated

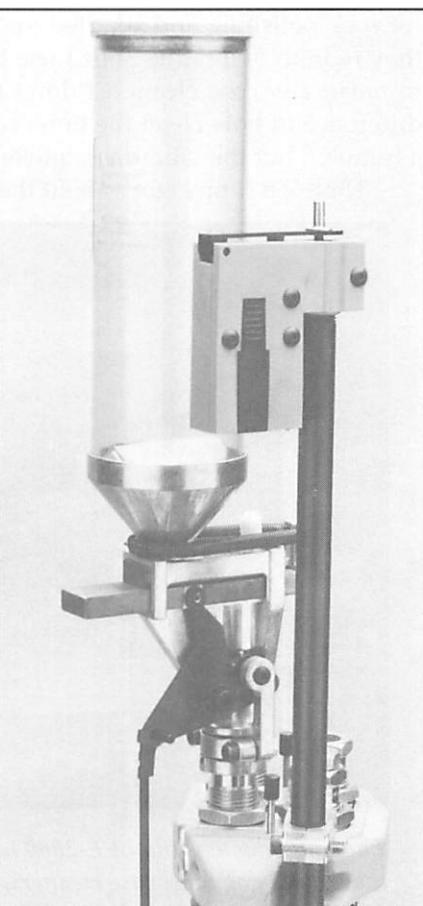
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cases—they seem to have about three-quarters less reloading life than the brass cases.

For bulk buying of 9mm, the same applies. If you are shooting 9mm Major, throw your brass away and buy a .38 Super.

For bulk buying of .38 Super, Midway offers a good deal on quantities of their own headstamped brass. For Remington brass, C.P. Bullets and Denny's Shooters Supply offer good deals. Look for either Winchester or Remington +P brass in Super, not the standard pressure stuff.

One item to make your life easier is a case tumbler. Rounds from a combat auto get filthy, and filthy reloads sometimes don't feed well. Brass should be cleaned every time after you shoot it and before you load it again.



Both the Dillon 550 and 1050 use the same reliable powder measure.

The main difference in primers is concentricity—Federal and Winchester primers seem to feed more reliably in progressive machines, therefore are recommended for use in these machines. You can buy primers in bulk from Midway or through *Shotgun News*.

Case Tumblers

Today's handloader has a number of tumblers and vibrators to choose from, but there are really only a few good ones for the IPSC shooter, in my opinion. The best buys in a case cleaner is either the Dillon FL-2000 or the Lyman Turbo 1200.

Both the Lyman and the Dillon are vibrating "tumblers" and not the rotating drum sort of tumbler that is really designed

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for rock polishing and adapted to cleaning brass cases. Actually they're both "vibrators" but I use the word tumbler generically to mean any case cleaner. I don't think you can really tell any difference in how clean the brass comes out of a vibrator versus a tumbler, but the vibrator is quieter in operation.

There's a funny story about the Dillon and Lyman tumblers.



The humongous Dillon FL-2000 handles case cleaning chores that would gag most case cleaners.

Awhile back Mike Dillon was interested in selling a good quality tumbler and he asked Lyman about buying some components of theirs so he could make his own tumbler. According to Mike, Lyman told him not only no, but hell no.

This was a mistake.

Dillon is not one to quit so he eventually assembled the components elsewhere to make a good tumbler. In honor of his friends at Lyman who were so cooperative, he named his tumbler the FL-2000. The "L" in "FL" stands for Lyman; I'll give you three guess what the "F" stands for!

RCBS also makes a good tumbler, although it doesn't have the large capacity of either the Lyman or the Dillon.

Tumbling Media

THE COMBAT AUTOMATIC

FBI Ammunition Performance Data

Caliber	Brand	Bullet	Velocity	Penetration	Success Rate
.45 ACP	Federal	230 gr. H'Shok	834 fps	16.80"	90.0%
.45 ACP	Olin	230 gr. FMJ	837 fps	28.63"	100.0%
.45 ACP	Remington	185 gr. JHP +P	1046 fps	15.07"	50.0%
.45 ACP	Black Hills	185 gr. JHP	941 fps	16.08"	60.0%
.45 ACP	Pro Load	185 gr. JHP	994 fps	12.44"	52.5%
.45 ACP	CCI/Speer	200 gr. JHP	877 fps	14.59"	50.0%
10mm	Hornady	200 gr. XTP	1056 fps	21.68"	100.0%
10mm	Federal	180 gr. JHP	980 fps	16.94"	100.0%
10mm	Hornady	170 gr. XTP	1165 fps	16.84"	97.5%
10mm	Federal	180 gr. H'Shok	931 fps	15.91"	92.5%
10mm	CCI/Speer	180 gr. PHP	929 fps	19.04"	97.5%
10mm	Federal	180 gr. JHP	896 fps	19.84"	100.0%
.40 S&W	Federal	180 gr. H'Shok	969 fps	17.41"	95.0%
.40 S&W	Winchester	180 gr. JHP	931 fps	15.81"	87.5%
.40 S&W	Federal	180 gr. JHP	960 fps	18.18"	90.0%
.40 S&W	Federal	155 gr. JHP	1167 fps	16.28"	87.5%
.357 Mag.	Federal	125 gr. JHP	1265 fps	12.04"	40.0%
.38 Spl.	CCI	125 gr. JSP +P	800 fps	20.31"	80.0%
.38 Spl.	Impact 3D	158 gr. LSWC	910 fps	16.39"	65.0%
.38 Spl.	Federal	125 gr. JHP +P	852 fps	10.70"	30.0%
.38 Spl.	Federal	125 gr. Nyclad	897 fps	9.91"	30.0%
9mm	Olin	124 gr. FMJ	1210 fps	24.34"	97.5%
9mm	Federal	147 gr. H'Shok	995 fps	16.97"	90.0%
9mm	Black Hills	147 gr. JHP	940 fps	17.31"	80.0%
9mm	CCI	125 gr. JSP	1023 fps	19.92"	75.0%
9mm	Federal	147 gr. JHP	938 fps	14.70"	65.0%
9mm	Impact 3D	147 gr. JHP	985 fps	16.26"	75.0%
9mm	Black Hills	147 gr. JHP	944 fps	12.43"	62.5%
9mm	Zero	115 gr. JHP	1114 fps	14.95"	47.5%
9mm	Federal	115 gr. JHP +P+	1237 fps	12.36"	35.0%
9mm	Federal	95 gr. JSP	1277 fps	12.91"	55.0%
9mm	Pro Load	115 gr. JHP	1298 fps	11.39"	30.0%

Results are the average of the FBI 40 round, eight-part test that duplicates bullet performance in human tissue with 10% ballistic gelatin. Bullets are fired in eight tests of five rounds each through a variety of barriers to simulate the real-life use of handgun ammunition for self-defense. "Success Rate" is defined as the number of rounds that meet or exceed the FBI penetration standard of 12" throughout the 40 round test. "Penetration" is the average depth that the 40 rounds penetrated. The eight tests were 1) bare gelatin 2) heavy clothing 3) steel (car door) 4) sheetrock 5) plywood 6) auto glass 7) heavy clothing at 20 yards 8) auto glass at 20 yards.

Selected Loads For IPSC Combat Autos

.38 Super

Bullet	Powder	Starting Load	Max Load	O.A.L.	Crimp
150 gr. FMJ	AA#7	8.8 grs.	9.5 grs.	1.265-70"	.381"
155 gr. L-SWC	AA#7	7.8 grs.	8.0 grs.	1.265-70"	.381"

.40 S&W

Bullet	Powder	Starting Load	Max Load	O.A.L.	Crimp
160 gr. FMJ	AA#5	7.8 grs.	8.0 grs.	1.135"	.420"
175 gr. FMJ	AA#5	6.7 grs.	6.9 grs.	1.135"	.420"
200 gr. FMJ	AA#5	5.9 grs.	6.2 grs.	1.135"	.420"

10mm Auto

Bullet	Powder	Starting Load	Max Load	O.A.L.	Crimp
160 gr. FMJ	AA#7	10.1 grs.	10.3 grs.	1.255"	.420"
175 gr. FMJ	AA#7	9.0 grs.	9.2 grs.	1.255"	.420"
200 gr. FMJ	AA#7	8.2 grs.	8.5 grs.	1.255"	.420"

.45 ACP

Bullet	Powder	Starting Load	Max Load	O.A.L.	Crimp
200 gr. L-SWC Bullseye		5.0 grs.	5.1 grs.	1.250"	.469"
200 gr. L-SWC WW231		5.7 grs.	5.8 grs.	1.250"	.469"

WARNING: Handloading can be a dangerous activity! Due to the inherent variations in reloading components and individual handloading techniques, we are not responsible for results obtained with this data. Always verify this handloading data with recommended loads from powder and bullet manufacturers.

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Forget the medium they sell for the tumbler and buy a sack of corn cob grit or other similar (and cheap) tumbling media. Then get some mag and aluminum polish from an auto parts store (we use a brand called *Mother's*) and add one teaspoon full for every third or fourth batch of cases you tumble.

The brass comes out looking new, and the tumbling medium lasts practically forever.

Specially treated media is expensive and breaks down quickly, while a sack of corn cob grit and a can of chrome polish is long lasting and super-economical.

On the whole, handloading is basically simple. There's not a lot of loads that work really well, and chances are that one of the popular or proven loads will work well in your .45.

However, if you are not willing or are unable to spend the time and effort to learn proper reloading techniques, I recommend that you stick to a good dependable factory or custom loaded ammunition.

Whatever ammo you choose for your next match or to carry in your defensive gun, I can recommend the following: While you have the barrel out of your gun for cleaning, just take a little extra time and drop each round of ammo in the chamber and make sure it fits with no tightness and goes to full depth (flush or slightly below the hood in the chamber).

In a match or on the street, it gives you vital confidence in your equipment.

Pistolsmiths for the Combat Auto

You should understand right now that my picks for the top ten combat pistolsmiths are just that—*my picks*. I don't pretend to know every pistolsmith in all 50 states, and I haven't examined every gun at every match in the country. I'm sure there are a lot of very good gunsmiths out there who aren't on my list.

I limited my picks to the pistolsmiths whose work I know personally. I can vouch for each and every one of their reputations and craftsmanship. Although I honestly think we at Wilson's build the finest gun at the best price anywhere, if you want to shop around a bit, any one of these guys will build you a good gun.

***Be forewarned
that good work
is always in
high demand.
That means
two things—
the best are
always
expensive and
busy.***

There are but ten pistolsmiths on my list which doesn't mean that I think there are only ten good gunsmiths in the country who specialize on combat pistols; what it means is that I've got to draw the line somewhere and ten is nice round number!

Be forewarned that good work is always in high demand. That means two things—the best are always expensive and busy.

Some of these men are backlogged at least a year, some as long as three years. Write for a current price sheet or catalog and inquire about the current waiting list. Remember, anything worth having is worth waiting for!

THE COMBAT AUTOMATIC

Also, be prepared for a bit of "sticker shock" if you've never bought a gun from a nationally-known pistolsmith. Quality is valuable, and if you want the best you'll have to pay for it.

However, most of these gunsmiths are quite reasonable on basic work like trigger jobs and accurizing. Everyone on my list offers a "street package" of basic modifications of one sort or another. Be a smart shopper and send for their catalogs and compare!

So shop around—but don't forget to check here at Wilson's!



A Wilson #130 Master Grade combat pistol is a complete "package" and all my "top ten" picks offer a similar package. The Wilson Master Grade features a Bo-Mar combat sight, a Wilson ambidextrous safety, trigger job with aluminum Wilson match trigger, Wilson Commander hammer, fitted Wilson beavertail grip safety, custom match-grade Wilson barrel and target (solid) bushing, serrated rear of slide, serrated top of slide, beveled mag well, polished feed ramp and throated barrel, lowered ejection port, polished and adjusted extractor, heavy duty recoil spring, Shok-Buff and guide rod, Pachmayr grips and mainspring housing, Metaloy plating on the frame and two extra Series 47 stainless steel magazines with bumper pads.



At the 1977 World Shoot in Rhodesia, the American team included (left to right) Raul Walters, Ray Chapman and Jerry Usher. All of them used customized combat automatics.

Wilson Combat Custom Pistols

Our specialties should be obvious after reading this book, but I think a few important points should stressed.

A Wilson custom gun offers a reasonable turn-around time and exceptional value for the money. We can deliver a full-house five-inch pistol in as short as two months, depending on our current backlog. A racegun like a Wilson Super Grade or Steel Special might take a bit longer, perhaps six to nine months.

Additionally, we always have one or two finished guns in stock for immediate delivery for those who "just can't wait."

We have several special packages available that are fully described in our full-color catalog (\$5 refundable on any order placed). These special packages include our full line of combat autos for police, special forces, self-defense and competition in addition to our line of custom revolvers for handgun hunting, Bianchi Cup competition and general shooting.

Please call or write for our current color catalog to:

THE COMBAT AUTOMATIC

Wilson's Gun Shop

P.O. Box 578-CA

Berryville, AR 72616

(501) 545-3618

Include \$5 for catalog

Ten Combat Pistolsmiths



A Wilson Accu-Comp "LE" with the slide locked back reveals the cone-style barrel that replaces the barrel bushing to achieve lockup at the front of the slide. Note how the barrel is resting on the full-length guide rod which serves to stabilize the barrel when the gun is out of battery. Most of the pistolsmiths on my "list" feature their own compensator designs on "package" guns like this one.

A Wilson custom gun offers a reasonable turn-around time and exceptional value for the money.

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Kim Ahrends
420 2nd Avenue
Clarion, IA 50525
(515) 532-3449

Kim is one of the fastest rising stars on the pistolsmithing horizon. He specializes in strictly "carry guns," non-compensated Commanders, Officers and Government models.



Kim Ahrends specializes in carry guns

His street-legal guns— while lacking the pizazz of a full-house racegun— are second to none. Kim also is a grip maker and many readers will be more familiar with his finely checkered stocks of exotic hardwoods for the 1911. At Wilson's we use Ahrends grips.

Ed Brown
Route 2, Box 2922
Perry, MO 63462

THE COMBAT AUTOMATIC

(314) 565-3261

Voted by his peers in the American Pistolsmiths Guild as the 1991 Outstanding American Pistolsmith, Ed is the developer of



Ed Brown's Maxi-Comp.

the Four Star compensator system for his brilliantly executed Maxi-Comp and Mini-Comp custom 1911s. Ed also designs and manufactures a growing line of combat accessories for the 1911 pistol and certain S&W models. His five-inch guns (Tactical Pistols) are especially well-done. Ed is a member of the American Pistolsmiths Guild.

Jim Garthwaite
Route 2, Box 310
Watsonstown, PA 17777
(717) 538-1566

Jim is quickly establishing a loyal following of discriminating combat shooters on not only the east coast but also nationally.



Jim Garthwaite custom competition pistol

Dave Anderson photo

Jim runs a traditional one-man-shop which assures the Garthwaite client that his gun will receive the full attention of the master craftsman himself. Jim's full-house competition gun sports a double-chamber compensator and some of the most beautifully detailed metalwork you will see anywhere. Jim is a member of the American Pistolsmiths Guild.

Richard Heinie
323 West Franklin
Havana, IL 62644
(309) 543-4535

Richard Heinie believes that there is a market for a truly superlative *handmade* combat pistol. He's right, of course, and Dick's uniquely designed 1911 pistols have set a standard of excellence that is recognized throughout the world by discriminating handgunners. The hallmark of a Heinie-built pistol is flawless handwork characterized by perfect metal

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Richard Heinie full-house custom pistol

checkering, precisely fitted dual-port compensators and outstanding detail finishing. Richard is a member of the American Pistolsmiths Guild.

George Heuning
World Class Pistols
P.O. Box 688
Brownsburg, IN 46112
(317) 852-0013

George is a former Indy car Chief Mechanic where he learned what precision machine work is all about! George is perhaps the finest metalsmith in the business. His unique approach to gunmaking is a combination of Old World handcraftsmanship with modern, state-of-the-art machinery. George offers a dual-port IPSC comp gun plus a variety of full-house five-inch

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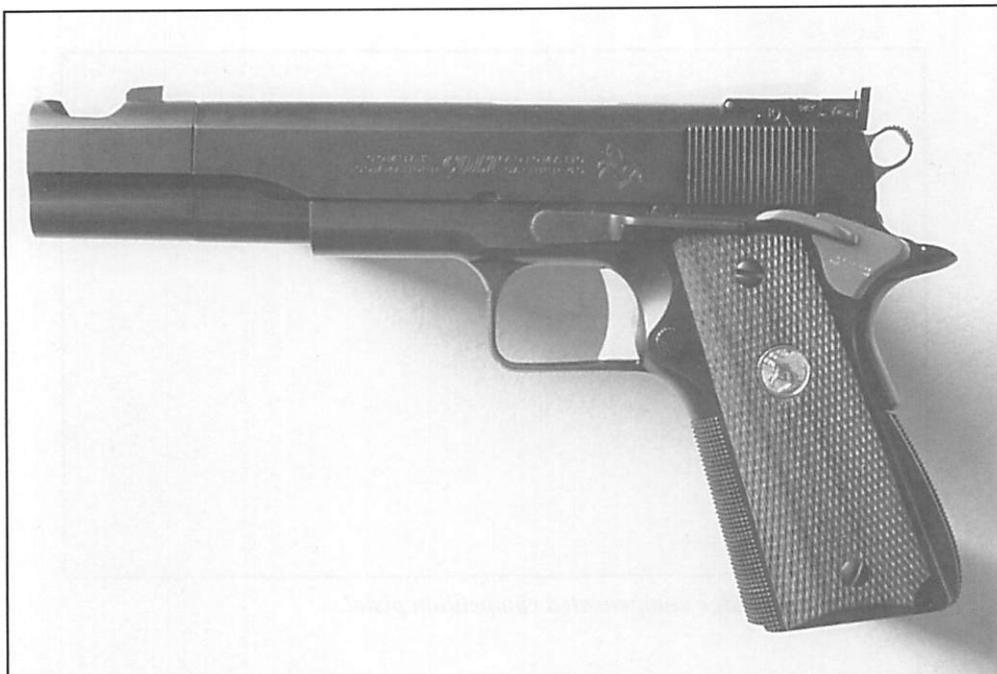


George Huening test firing his modular pistol for Bianchi Cup.

configurations in different price ranges. His modular pistol for Bianchi Cup shooting is capable of sub-one-inch groups at 50 yards! George also offers a carbon fiber scope mount for 1911s.

THE COMBAT AUTOMATIC

James W. Hoag
Hoag Gunworks
8523 Canoga Avenue
Suite C
Canoga Park, CA 91304
(818) 998-1510



Full-house compensated Racegun from Jim Hoag.

Jim Hoag is one of the "old masters" of the combat .45, but even though the guns have changed dramatically since Jim first accurized a .45, he has kept pace with the new technology. Jim pioneered the longslide .45, a concept that was really ahead of its time. The flawless workmanship in a Hoag longslide has long made that special gun a favorite of collectors and shooters alike. Today's Hoag customer can expect the same level of craftsmanship except in a modern 1911 incorporating Jim's compensator design in a full-slide profile. A trademark of Jim's is his uniquely sculpted beavertail grip safety. For "old world" quality and modern design, look up the master himself, Jim Hoag.

BILL WILSON

Bill Laughridge
Cylinder & Slide Shop
245 East 4th Street
Fremont, NE 68025
(402) 721-4277



Bill Laughridge compensated competition pistol.

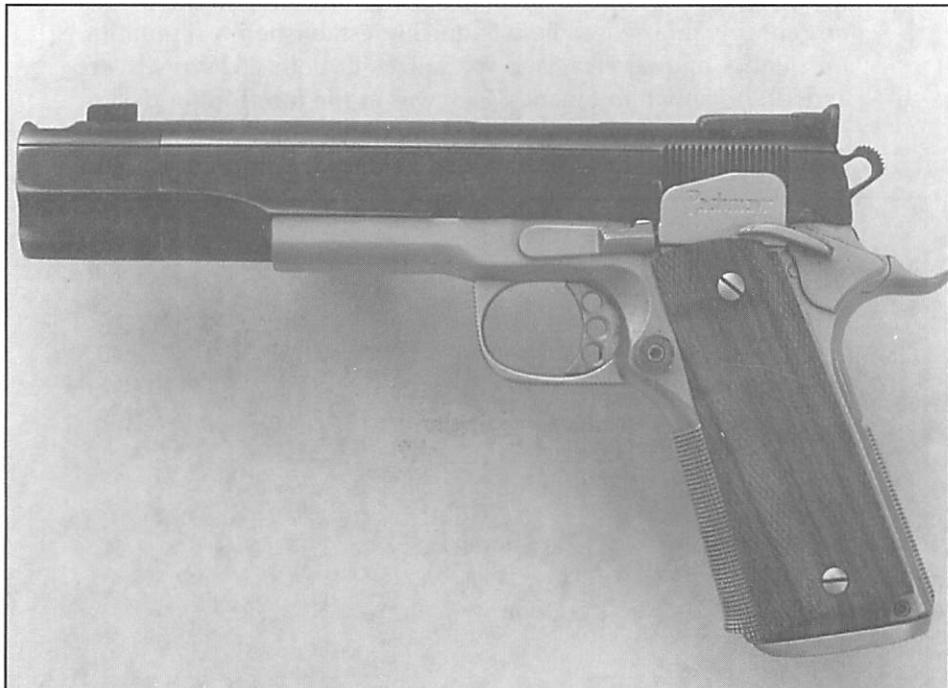
Bill Laughridge is a master gunsmith capable of outstanding "one of a kind" pistols, but he still offers a basic line of action jobs and sight installations. This is somewhat unique in the custom pistolsmithing business because most of the better known gunsmiths are specializing in full-house work or "package" work and discourage a simple \$50 sight installation. Not Bill, he will handle the "bread and butter" work just as happily and competently as he will build you a fully-blown racegun to knock your eyes out! Bill's "Full House Mouse" is a compensated, customized .380 Government Model, another unique offering that sets the Cylinder & Slide Shop apart.

Steve Nastoff
Nastoff's .45 Shop

THE COMBAT AUTOMATIC

P.O. Box 446
North Jackson, OH 44451
(216) 538-2977

Steve Nastoff holds the distinct honor of providing his clients with some of the very finest cosmetics on his handbuilt combat



Steve Nastoff's Super Comp II shown here has been supplanted with a double-port design called Super Comp III

pistols. His waiting list at one time approached four years, but his current backlog is somewhat more reasonable, more like two or three. This should tell you something. Steve Nastoff's handguns are 1) laboriously handbuilt, only a few each year and 2) eagerly sought after by discriminating clients. Steve's superlative workmanship is nothing short of phenomenal. You are assured of a level of consummate skill and, yes, even artistic expression in a handmade Steve Nastoff custom pistol.

Jack Weigand
Weigand Combat Handguns

BILL WILSON

Weigand Combat Handguns
341 South Main Road
Mountaintop, PA 17777
(717) 474-9804

Jack Weigand operates a small pistolsmithing shop in the woods of Pennsylvania where he has quickly established a reputation for quality and service. Jack specializes in both S&W revolvers and 1911 combat automatics. Jack was at the forefront of design work on the new generation of Aimpoint-sighted IPSC pistols. His amazingly light (40 ozs.), well-balanced, Aimpoint-sighted



Steel Challenge pistols in .38 Super have already attracted a wide following in the brief time since their introduction. Jack was instrumental in the development of the Schuemann-designed Caspian Arms "Hybrid System" of compensator. His own compensator designs are also popular.

Steven P. Woods
3840 Dahlgren Ct.

THE COMBAT AUTOMATIC

Ellicott City, MD 21043
(301) 465-7979

Steve Woods operates a one-man shop specializing in combat conversion of the 1911 pistol. His beautifully illustrated catalog



Steve Woods full-house custom combat pistol.

(\$5) reveals the superb fit and finish that characterizes a Woods-built handgun. Steve's handcut checkering is flawlessly executed just like his detailed polishing and metal finishing. Steve is a member of the American Pistolsmiths Guild

Care And Maintenance

With routine, proper maintenance, a good combat .45 auto is very long lasting. In fact, if no excessive loads are used, with proper maintenance a combat auto should go 10,000 to 20,000 rounds with little or no gunsmithing. The advantages of establishing a proper maintenance routine, then, are obvious.

The first step in proper maintenance is a thorough cleaning. The market is now flooded with numerous cleaners and lubricants. One that we have used around the shop for years, and which really works, is Du Pont Prep-Sol™, available at most automobile supply houses.

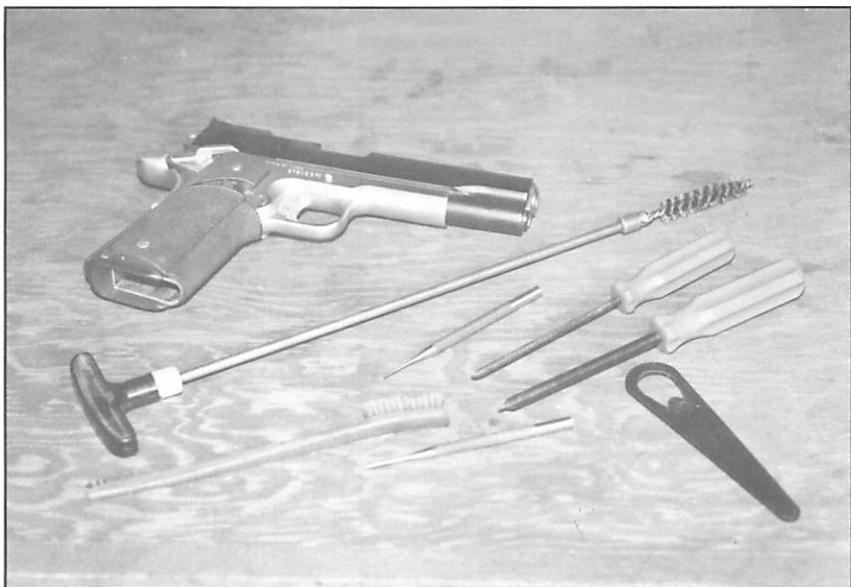
Before using Prep-Sol be sure and read the directions on the can. This stuff is pretty potent and you shouldn't use it in an enclosed area without proper ventilation.

It has the ability to almost instantly dissolve firing residue and remove oil and grease. A convenient way to use Prep-Sol is to pour it into a readily available military ammo can. The size that has an opening five inches wide and 11 inches long is a good choice for cleaning handguns. The lid on this type box has a rubber seal so the Prep-Sol won't evaporate when not in use.

Another cleaning chemical I use is Hoppes #9 bench rest solvent. This stuff is great for copper fouling in the bore and firing residue on the feed ramp, etc.

As far as gun lubricants go, I feel our ULTIMA-LUBE "T" is the best autopistol lube around. This is the only lubricant I know of that will not burn off the barrel during those hot July and August practice sessions.

THE COMBAT AUTOMATIC



The basic cleaning equipment includes a bronze bore brush, a toothbrush, a couple of small punches, proper size "gunsmith" screw drivers and a barrel bushing wrench.

In my experience it keeps wear to a minimum and stays where you put it. We've recently been using a product called Birchwood-Casey "Sheath" on a flannel rag to wipe down the exterior of our guns, and it is doing a remarkable job of preventing rust and corrosion.

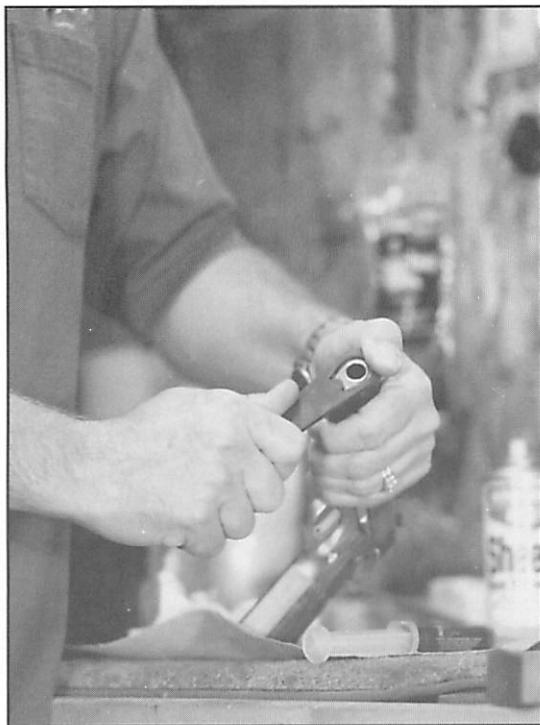
The only other lubricant I ever use is ULTIMA-LUBE grease. After a complete cleaning of my .45s, I usually put one drop of ULTIMA-LUBE grease on each hammer hook as I reassemble the guns. This tenacious stuff seems to stay on the gun's hammer-sear engagement areas forever.

Once you've got your five cleaners and lubricants, it's time to assemble the other equipment you'll need. To the aforementioned ammo can, add a GI M-16 cleaning brush or an old toothbrush, a cleaning rod with a .50 caliber brass brush, and a small assortment of screw drivers and punches.

My cleaning-maintenance routine goes as follows:

Field Stripping

Field strip the gun down to an assembled frame assembly and a disassembled slide assembly for normal cleaning. I usually do this every 300 to 600 rounds, depending on the type



The first steps are disassembly. Using the barrel wrench remove the recoil plug and take out the slide stop, then pull the slide off.

and a disassembled slide assembly for normal cleaning. I usually do this every 300 to 600 rounds, depending on the type of ammunition I'm shooting and whether or not a match is coming up.

The feed ramp and rails on the frame will be

Next, the barrel and barrel bushing are removed from the front of the slide.

caked with firing residue. To remove this residue, I saturate these areas with Hoppes #9 bench rest solvent and set the frame aside.

Now dunk the barrel, slide and internal parts of the slide into the ammo can of Prep-Sol and let them soak for two to five minutes. Be sure and wear rubber gloves when working with Prep-Sol — it's potent! If you get impatient while the parts are soaking, you can be brushing off the small parts, such as the hook area of the extractor.



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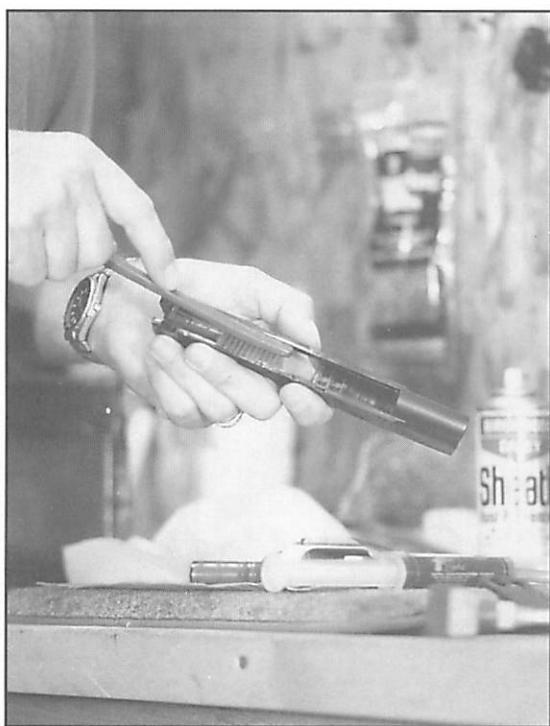
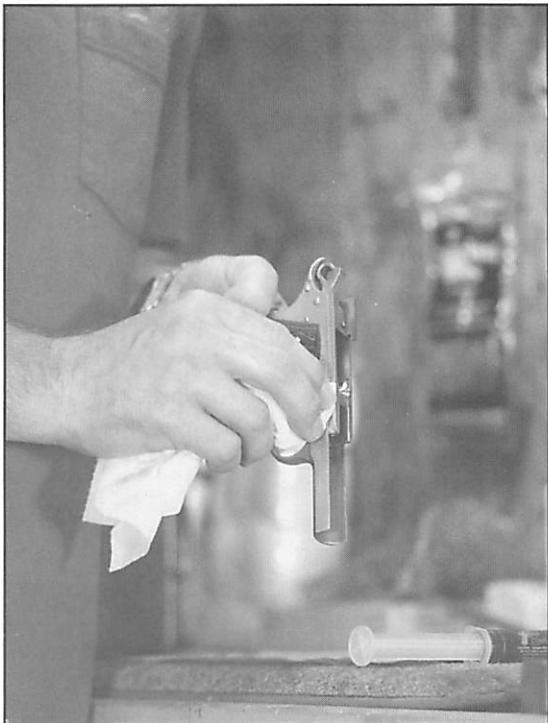
The frame is scrubbed clean while the rest of the parts soak in Prep-Sol.

After the soak in the Prep-Sol, the firing residue can easily be brushed out of the barrel locking recesses of the slide and the slide rails.

After the slide is scrubbed clean with the cleaning brush, you can dry off the excess Prep-Sol with compressed air if it's available. If not, an electric hair dryer works just as well.

Bore Cleaning

Next scrub the out-



side of the barrel and clean the chamber and bore with a .50 caliber brass brush. Dunk the brass bore brush in the Prep-Sol between strokes through the barrel; about ten strokes should clear the bore. Use Hoppes #9 bench rest solvent if you've been shooting a lot of jacketed bullets.

After cleaning and drying the slide, barrel
Use the toothbrush to scrub the inside of slide. Be sure and get the breech face real good, it gets pretty dirty.



Scrub the bore clean with a bronze brush always working the brush from the chamber forward with smooth, even strokes.

and related parts, it's time to wipe the fouling off the frame. Since the frame has been soaking in Hoppes #9 for the last five minutes or so, the fouling should brush off easily with the M-16 cleaning brush.

Once the gun is clean, it's time to inspect the parts and check the extractor tension. Inspect all the parts for excessive wear and cracks.

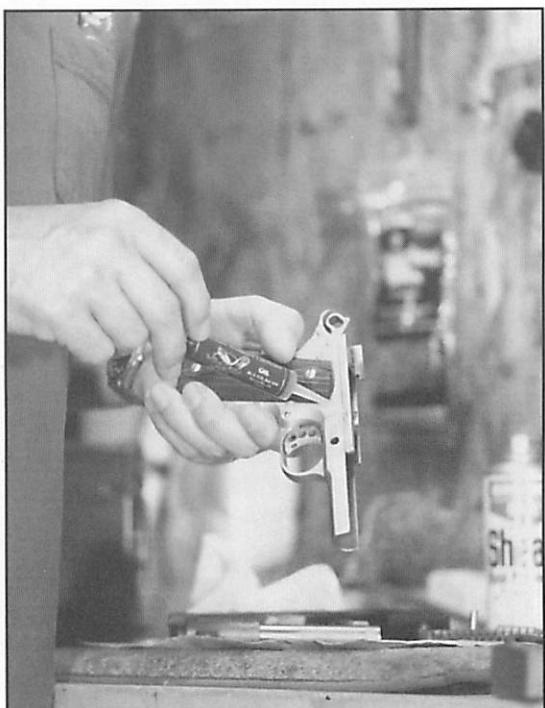
To check for proper

extractor tension, install the extractor, firing pin and firing pin stop. Now take a loaded cartridge and slide it under the extractor hook.

This should take about four pounds of tension and should hold the cartridge in place as you turn the slide upright.

If the tension is not right, I suggest you take the gun to a qualified pistolsmith for

Lubricate the pistol as I explain in the text, but don't overdo it. A few drops are all you need.



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Check extractor tension by slipping a loaded round under it. The extractor should have about four pounds of tension, just enough to hold a loaded round in place.

adjustment, as there is more to it than simply bending the extractor.

Let's assume everything is okay and we're ready to lubricate and assemble.

I recommend you lubricate the following areas with ULTIMA-LUBE "T".

- Locking recesses in the slide

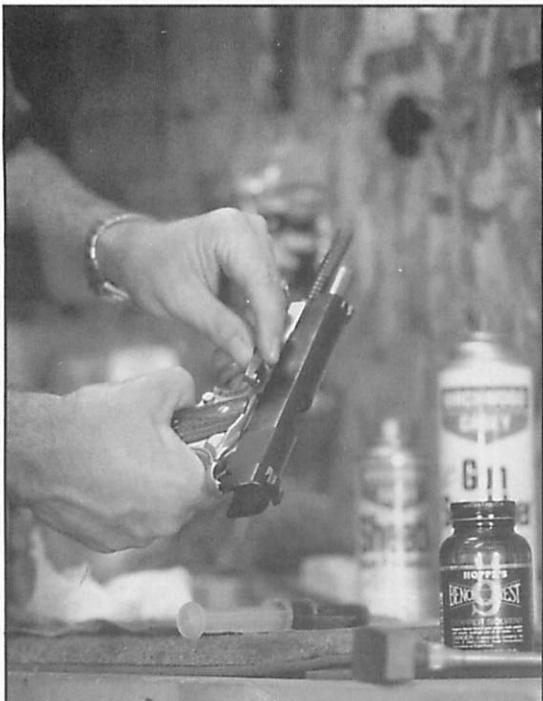


- Slide rails
- Barrel locking lugs and slide stop lugs
- Outside of the barrel
 - Frame rails
- Disconnector tip
- Hammer-sear engagement
- Guide rod

Reassemble the gun and put a couple of drops of ULTIMA-LUBE "T" on the front of the barrel hood and cycle the slide a dozen times or so.

Don't forget the locking lugs and slide stop lugs. A drop on the slide stop won't hurt either.





Reassemble the gun carefully checking for excessive wear. Be sure and line the barrel link up properly—if the slide stop is stiff to insert, the link is probably not hanging freely.

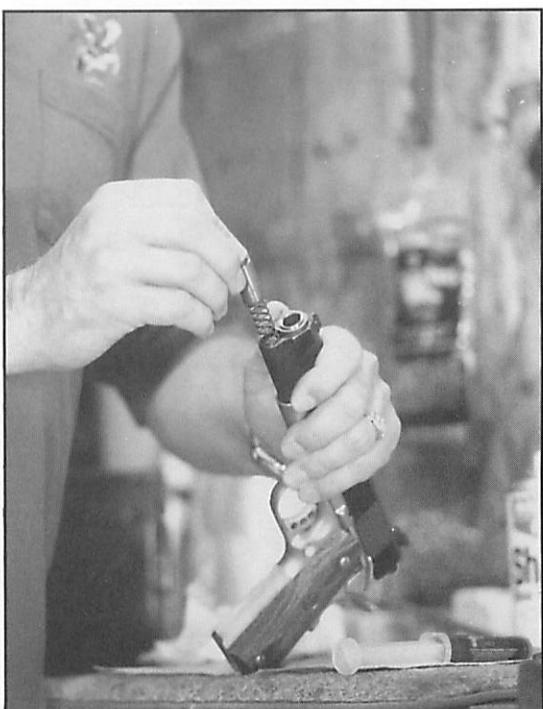
Now take a flannel rag treated with Birchwood-Caskey SHEATH and wipe down the outer finish, wiping away any ULTIMA-LUBE that might have worked out. If you're headed for a match, I suggest you shoot a full magazine of ammo through the gun to foul the bore and to serve as a

function check.

In addition to cleaning and lubrication, proper maintenance also consists of periodic replacement of springs and occasionally a part or two.

If you shoot hardball or slightly lighter ammo in a standard size gun, recoil springs should be replaced every 2,000 rounds or so. Use 18 pound springs for five inch guns and 20

Carefully re-insert the recoil spring plug. Watch out it doesn't slip and go sailing across the room!



THE COMBAT AUTOMATIC

Lightly spray the outside of the gun with Sheath to prevent rust.

pound springs for Commanders.

Heavy barreled guns and long slides usually don't require as heavy a recoil spring or changing nearly as often - about every 4,000 rounds is sufficient.

Compensated pistol use a wide variety of springs depending on the caliber and the load fired. Lightweight "Steel Challenge" type guns can operate on as light as

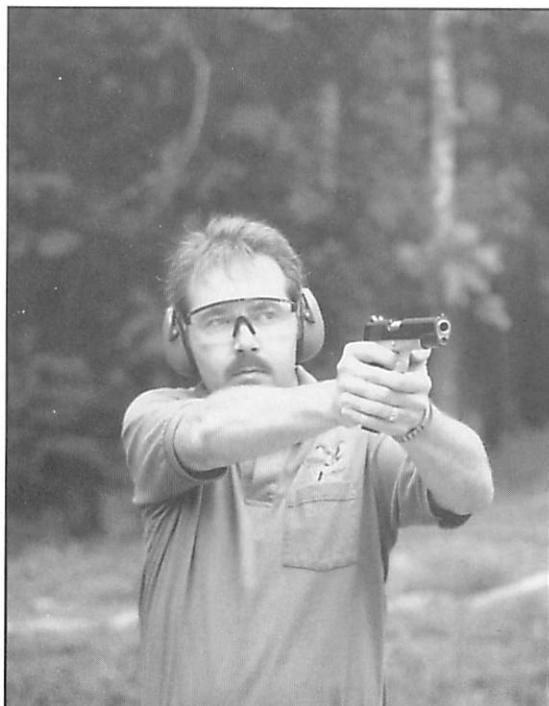


seven pound springs, but nine or 10 is more common.

Major loads in .38 Super use springs from 12 to 15 pounds. Consult the maker of your custom pistol on the recommended spring weight.

Firing pin springs will batter out of shape at the front coil and should be replaced every 5,000 rounds, more often if you do a lot of dry firing.

Before a gun is ready for a match or self-defense, it should be test fired after a good cleaning.



BILL WILSON

I recommend the extra power firing pin springs for all replacements.

The life of your frame and slide can be greatly extended by the constant use of the SHOK-BUFF polyfiber buffers.

The buffers should be replaced every 500 to 1,000 rounds in standard size guns, and every 2,000 to 3,000 rounds in heavy barrelled guns. The life of these buffers depends almost entirely on how hot your ammo is and the weight of your recoil spring.

The other springs in the .45 auto rarely need replacement. However, in my experience with the .45, the following parts are the most likely to fail, and I suggest you keep a spare of each on hand:

- Firing pin stop
- Slide stop
- Extractor
- Collect bushings

The latter three parts should be fitted to your individual gun, so in the event of a breakage you can merely replace the part and go on shooting.

By following these simple cleaning and maintenance procedures, the useful life of your combat auto will be greatly extended. In addition, you will probably have a lot fewer problems with your gun.

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