

# The Handloader Magazine

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May-June, 1967

**Mystic S.E.E.** Ashley

**Bullet Design** Hagel

**Moulding** Nonte

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## Features:

The Mystic S.E.E.	Col. G. O. Ashley	14
On Bullet Design	Bob Hagel	22
New Remington 788 Rifle	Larry Koller	26
Roy Weatherby's .224 Magnum	Ken Waters	30
Design for the Wimbledon	Homer Powley	34
Handloading in Alaska	Bob Steindler	36
Bullet Casting (Part II)	Maj. George Nonte	38
Principles of Reloading	Edward Yard	42
'Instant Bullets'	Otto Schofield	46

## Departments:

Editorial	4	Book Reviews	56
Law MATTERS	5	Answers Please	58
Reader By-Lines	8	Product Tests	62
Lock, Stock, Barrel	11	Harvey Donaldson	66



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## Your May-June Cover

The sight of a typical loading bench stirs different feelings among reloaders, but common to us all is an overwhelming desire to "get into the act." Shown on this month's cover are two Savage tools, the Model 930 shotshell press and the Model 730 metallic press. Transparency courtesy of John Marsman, Savage Arms.



## TOM GILLMAN breaks records with our VARMINT BULLETS



Tom Gillman has broken 9 World Records (N.B.R.S.A.) with Sierra Bullets. Here are some of his record 5-shot groups:

- HEAVY VARMINT  
.1923" at 200 yds.  
(using Sierra's .22 cal., 53 gr. H.P.)
- SPORTER  
.137" at 100 yds.  
.372" MOA; 200 yd. Aggregate Record.  
.4131" MOA; 5 groups 100 yds. & 5 groups 200 yds.  
(using Sierra's 6 MM, 75 gr. Hollow Point)
- Mr. Gillman also won the following NATIONAL MATCHES with these record 5-shot groups:
- 3-GUN AGGREGATE VARMINT & SPORTER  
1964, Abilene, Tex.; 1966, Midland, Tex.
- HEAVY VARMINT  
1964, Abilene, Tex.; 1965, Johnstown, N. Y.
- LIGHT VARMINT  
1964, Abilene, Tex.
- SPORTER  
1966, Midland, Tex.

Tom Gillman is the only shooter who has won all Varmint Class Gun Aggregates, Light Varmint, Heavy Varmint and Sporter, at the National Matches.



Here are a few examples of our Hollow Point Varmint Bullets. (We make 54 bullets of all kinds for all popular calibers.) When you go varmint hunting find out what real accuracy is. Reload and shoot Sierra Bullets.

**SIERRA BULLETS**

10532 S. Painter Ave. • Santa Fe Springs, Calif.

# What Has Happened To Bazooka Bill?

**I**T WASN'T TOO LONG ago that proponents of firearms control were screaming about the lack of regulations governing the traffic in such wartime weapons as bazookas, mortars, cannons and grenade launchers. In their zeal, ostensibly to curb the nation's crime rate, they lumped such weapons with sporting firearms and demanded blanket restrictions.

After listening to reason from sportsmen who found no argument in regulating wartime weaponry, lawmakers agreed that the job could be done by amending the National Firearms Act, which has successfully controlled the sale and use of machine guns.

Sportsmen pointed out that they were as eager as anyone else to place restrictions on such weapons, for which they have no use. Sporting firearms, however, are another matter and should be treated separately.

Thus the "Bazooka Bill" was born, a measure seeking to include these weapons under the National Firearms Act to be regulated in the same manner machine guns have been since the act came into being. No opposition was heard to the bill. Its quick and safe passage was practically guaranteed.

A couple of years have passed but the "Bazooka Bill" has yet to be brought out of hiding and proposed for enactment. The time has come to wonder why. The National Firearms Act has certainly been an effective tool in dealing with machine guns. There's no reason to doubt that it will work equally well with bazookas, mortars and cannons.

With sportsmen solidly behind the measure and lawmakers also indicating their approval, its passage has been mysteriously stymied rather than supported.

Could there be an ulterior motive behind this inaction? Is passage of the "Bazooka Bill" being delayed deliberately by proponents of firearms regulations who can see that by solving this phase of the problem they will lose a major propaganda weapon in their fight for a blanket control measure that would include sporting firearms as well?

Lawmakers can show good faith in their efforts to curb misuse of firearms by pushing for immediate passage of the "Bazooka Bill." As sportsmen have stated time and again, such wartime weapons have no business being classified with sporting firearms.

Let's place them where they belong, with the machine gun under the National Firearms Act. Anything short of that will be a sign of bad faith and will certainly raise a question as to the sincerity of those who profess to be concerned about the nation's crime problem.

Charlie Du Buisson  
Savage Arms

# INSTANT



# BULLETS

By Otto Schofield

**Y**OU JUST SWAPPED for a new (or even not so new) rifle—maybe a .35 or .40 wildcat. Fellow you got it from threw in a set of loading dies and a hatful of cases, but no bullets. Weekend staring you in the face, and plenty of time to shoot, to try out the new toy, but the local gunshop hasn't got a single .35 or .40 caliber bullet in the house. It's no use raising sand with the fellow who runs the shop—he can't afford to keep every bullet imaginable on hand, just in case you might want a couple of bucks' worth every year or two.

I've found myself in that same boat many a time. An untried gun on hand and nothing to shoot in it. A gun like that just *demands* to be shot, and I, for one, can't wait around for the mail carrier to bring in the bullets needed.

No need to get excited, though, for I'll bet your scrap box contains the raw material for reasonably good bullets in almost any caliber you'll ever need. Just a little thought will turn fired cases, other bullets, and assorted odds and ends into projectiles. The end product may look a bit odd, and be somewhat unconventional in construction, but it will work, and that's what counts.

Take the time I lived in a wide spot in the road, out in west Texas, and acquired a shiny, new .35 Whelen. There wasn't a .35 bullet within a hundred miles, and getting some by mail would have taken two weeks. Digging through the footlocker that housed some of my goodies, my eye chanced on some .30 carbine cases. A quick check with the old mike disclosed they were just a smidgin too large in diameter for that .358" bore, but other-wise could be cut off to make fairly decent brass bullet jackets. A case was cut off, guessing at length, and a 100-grain, cast lead .32-20 bullet was driven down inside, tight against the head. After a bit of cogitation, the assembly was placed in the .357" diameter bullet sizing chamber of a Lyman nutcracker tool, and pressed through. It came out .358", just what was needed. An issue .30 carbine bullet was seated hard on top of the .32-20 slug, and crimped in place with a .32-20 bullet seating chamber in that same nutcracker.

Looking more like a loaded cartridge than a bullet, this assembly was loaded ahead of a moderate charge of 4895 in a .35 Whelen case, and fired into a

caliche bank on the edge of town. Nothing blew up, and the fired case looked fine. Digging in the bank showed pretty fair penetration, though only the base of the "jacket" was recovered.

Back at the house, I made up ten more of the same, taking care to keep them as uniform as possible. Out in the desert again, five were used for sighting in, the other five killed two beer cans and a rather stupid coyote, who sat still while I got his range.

Since then, I've made many hundreds of very accurate 200-grain .35 bullets for use in my Marlin carbine, but used a .38 Special bullet swaging die in an RCBS press, for a faster, more convenient job.

That got me started. A friend brought around a .40-65, '86 Winchester, wanting some jacketed soft points for it. We cut off .30 Remington cases and shoved them into a .41 Long Colt resizing die to reduce the diameter to about .407 to .408". They were then pressed into a tapered hole in a piece of steel plate to give them a shape somewhat like the old-style truncated-cone Luger bullets.

After that, we just poured them full of melted lead, having coated the insides with soldering flux beforehand. When cool, we dribbled in a bit more lead to make up for contraction, then set the whole mess in an iron skillet over a hot fire. The lead core melted again, and more or less soldered itself to the brass jackets. To do things up really brown, we rolled cannelures in those bullets, using a worn-out three-cornered file.

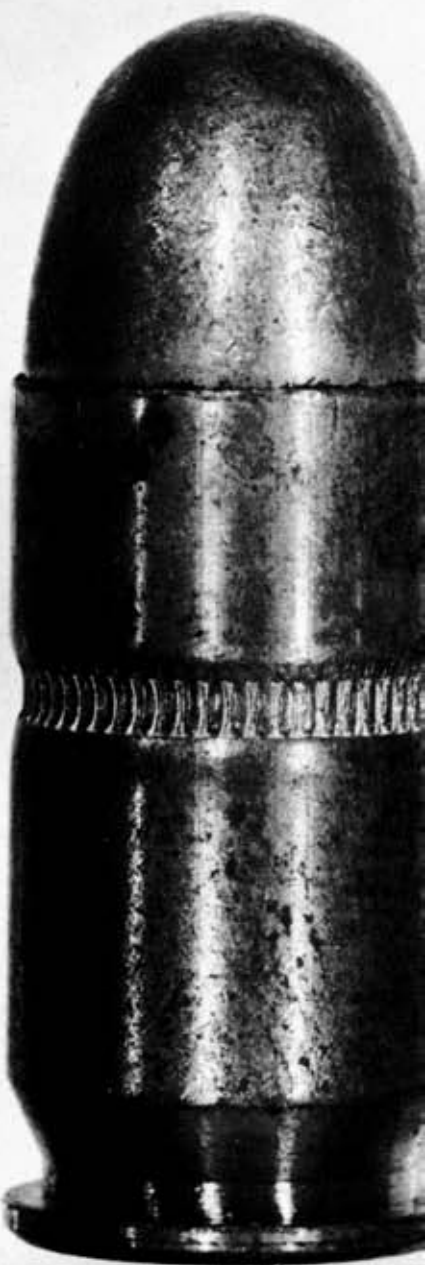
Assembled in an original Winchester loading tool, ahead of 4759 powder, they shot just about as well as black powder factory stuff. Sure, it took us the better part of a day to make up twenty rounds, but we got what Tony wanted. I guarantee that a Texas white tail hit by one of those "poured" bullets couldn't tell the difference from a factory load.

Some years later, a variation of the same method was used to make up a few light bullets for another friend's .475 Nitro Express double rifle. Empty .45 ACP cases were resized and filled with molten lead to about a quarter inch from the mouth. When cool, necks

were fluxed, and standard jacketed .45 pistol bullets tinned on their bearing surfaces. Bullets were seated hard on the lead, and the assembly heated with a torch until beads of lead could be seen oozing out around the bullet when it was pressed downward. I don't know if he ever killed any game with those bullets, but they did allow him to get that fine rifle perking for some cheap plinking.

I have another friend who doesn't mind paying any price for his hunting

The .475 bullet made by filling the case with melted lead, seating an issue bullet on top. Cannelure is rolled in with SAS tool.





ammunition — after all, he figures one round is enough for any animal. He doesn't like cast bullets, but flatly refuses to pay the going price for jacketed soft points for his \$750, .375 Magnum. And he shoots a lot for fun.

The rims were turned off .38 Special cases, after the cases were resized in a somewhat undersize die. They were then trimmed to length to produce a 270-grain soft point. Cases were pushed back into the resizing die, using a flatfaced shell holder with no primer hole in it. A pair of 110-grain wad-cutter lead bullets were then seated in the case, driving them tightly into place with a rod through the top of the die, to compact the lead and make certain it flowed to fill every nook and cranny.

Driven out of the die, these "bullets" were then chucked in a drill press, base first. A tool rest was bolted to the press table, and the bullet noses were spun, free-hand, to a pleasing profile. The shanks of old, high-speed drills were ground and polished to shape, and set in hammer handles to do the spinning. Hospital-style green soap served for lubricant.

Those bullets shot into less than two M.O.A., but later Bill invested in a set of Hollywood bullet swaging dies for the .375. Even so, he still used the rimless .38 cases for jackets.

Another time I was in Europe, with

plenty of good Lugers all around — but not much ammunition to shoot in them. Having no bullet mold handy in the right size, a couple of the boys and I tried to make up some jacketed bullets. We didn't have any equipment for that either.

Knowing the jacket material of .30 carbine bullets would stretch a good bit, we tried our hand at upsetting those short, 110-grain bullets to .354" diameter. At first it didn't work, because we tried to do it all in one pass. But then, three holes were drilled and polished in a piece of inch-thick steel plate. They were .320", .340", and .355" in diameter. Punches with a conical depression in the end were made to fit loosely into each of the holes.

The pierced plate was simply laid on another heavy plate, .30 caliber bullets dropped base-down in the holes. The punches were inserted and whacked a few times with a two-pound hammer. By lifting up the holed plate, the bullets could be driven on through with the same punches. By upsetting the bullets progressively in the different holes, they came up to .354"-.355" without any trouble; however, only gilding metal jacketed slugs would do this. The so-called "alternate" bullet made with copper-plated steel jackets would split.

Those bullets weren't as pretty as what can be made with a set of Frank Hemsted's fine dies, but they seemed

to shoot as well in our Lugers as any of the old military ammo we had.

Bullets can be reduced in diameter also. I once needed a supply of .330" bullets for a .318 Wesley Richards Accelerated Express rifle. The closest available was a batch of Kynoch .333" diameter. An old Lyman .326" (8mm) bullet sizing die was carefully polished out to about .329". The bullets were lubricated with cup grease, then pressed through the hole point first, using a decrepit old bench vise for power.

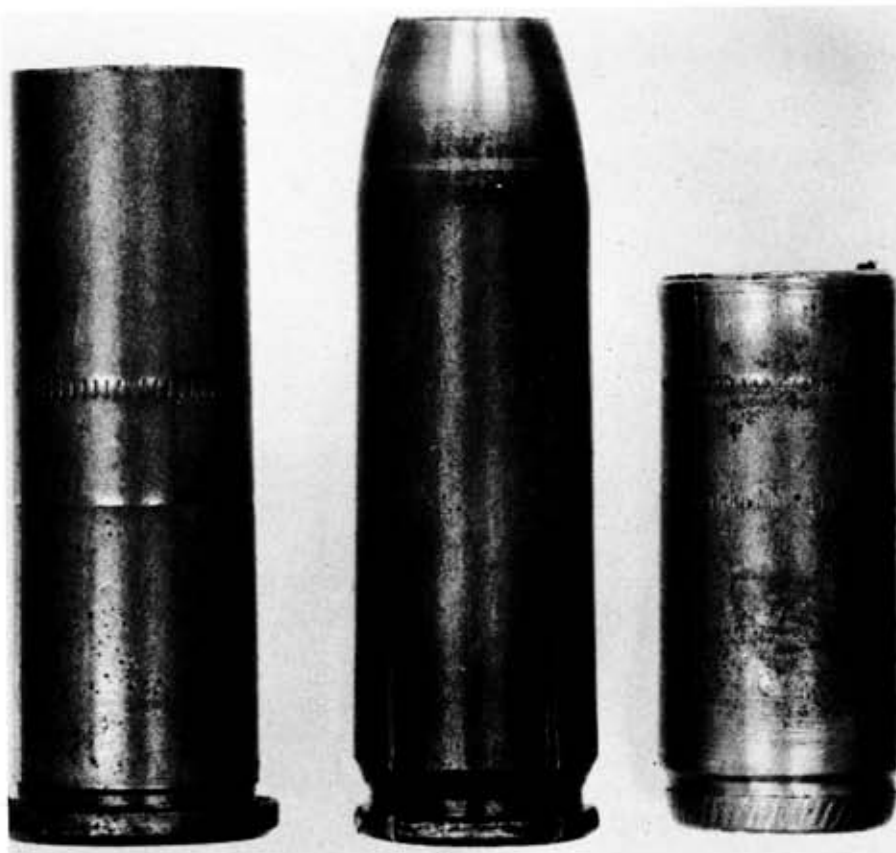
The bullets worked fine, though some purist will say that the jackets were loosened on the core by the resizing process. That's probably right, but they still worked fine in that W. R. rifle. A couple of fellows I know make 7mm (.284" dia.) bullets by reducing 7.35mm Italian military bullets the same way. They get accuracy of around two M.O.A. so the process can't be all bad. Then, too, I've squeezed those beautiful 7.65mm Argentine boat-tails down from .314" to .3085", so as to use them in .30-06. They seemed to shoot as well as some lots of military '06.

So far you've not heard any special tools mentioned, other than those that could be made up out of scrap metal. Generally, a resizing die and a couple of punches is all you'll need to turn out a few special bullets. Of course, if you



Above, a .35 caliber bullet swaged from .30 Carbine case. Half-jacket is placed over the lead nose to protect it. Cannellure is rolled in after swaging. Note case headstamp in the bullet base.

Left, .38 Special case; right, same case shortened and rim filed off in drill press to form .375 jacket. Center, the .35 bullet formed by spinning .30 Carbine case in drill press.



were to decide to make up several hundred in a short time, then you'd need (or at least wish for) conventional swaging dies and tools.

But right there is where you spoil the whole show. We're talking about just a few bullets to get an odd-ball gun working, or to see you through a dry spell when what you really want can't be had easily. If you want to go whole hog and make these bullets routinely, get ready to spend some jack.

So how do you make those special-diameter sizing dies used for every job I've mentioned? Simple. If you've got an old bullet sizing die you won't need again, merely open it up to size with a "poor man's lap"—a piece of steel rod (a large nail or spike or old bolt will do) slotted in one end to take a strip of abrasive cloth. Wind enough cloth around the rod to make it a tight fit in the existing hole.

Spin the assembly in the hole with your electric drill. As the hole gets large, add a bit more abrasive cloth. By using finer cloth or some that is well worn and wet with oil, you can give that hole a finish that is plenty slick for that purpose. If you lack an

inside mike to keep track of the hole diameter, simply drive a lead slug through it, then measure the slug.

The hole thus produced will serve either as the body of a swaging die, or, as a sizing die. If it's to be for the latter, enlarge one end enough to get bullets started straight. Do this by lapping more out of one end than the other.

Of course, if you don't have an old die, then you'll have to start with a chunk of steel and drill a hole through it first. Any kind of steel or iron will do for a few bullets. Just don't try to use brass, copper or aluminum. Use a drill bit just slightly under the size you want your hole to finish. An electric drill will make the job a lot easier, but I've done it with a hand-cranked breast drill, and it isn't really too hard a job—just takes a while. Polish the hole out to size, and you're in business.

To swage bullets in a rough die such as this you'll need a nose punch, and perhaps a base punch, as well. Usually the latter can be dispensed with, if you simply clamp the die solidly to a heavy metal plate. If you can settle for a plain, wadcutter-type bullet, all

you need is a flat-nose punch. If you want a fancy point on the bullets, though, you'll have to worry a cavity in the nose of the punch.

Bring the punch to a diameter that will slip easily into the die. Pick a size just over that of the die hole, then polish, and file it down while it is spun in your electric drill. As a last resort, have somebody crank the hand drill for you. It's slow, but will get the job done. Then drill a small hole in the end of the punch, making sure it's centered. This hole can be opened up with a countersink or series of larger drills to give you a cavity that will produce a conical point on the finished bullet. Polish the cavity as smooth as possible, using abrasive cloth on a shaped stick.

Dies of this sort can be used in a heavy bench vise, an arbor press, or simply by driving the punch down with a heavy hammer. Not fancy, but workable.

So, you see, it's not really difficult to make up bullets that will shoot in almost any odd-ball caliber you encounter. The only question is whether it's worth the effort to you. ●



Left to right: .30 Carbine case; same but shortened and partially filled with lead core and topped with an issue .30 bullet to make a 275-grain .35 bullet; 230-grain S.P. swaged in Hemp die from .30 Carbine case with .30 half jacket over top a la Silvertip; 190-grain plain S.P. swaged from .30 Carbine case; lead and H-J bullets used for cores and tips.