



Technical Newsletter From  
Your Ballistic Technicians

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## 1998: Championship Year In Review

Sierra MatchKing's enjoyed unrivaled success in competition shooting in 1998. At the National Matches held at Camp Perry, an overwhelming majority of Trophy Winners were shooting Sierra Bullets including:

Palma Rifle Aggregate . . . . .	Lonnie Kuhns	Air Force Cup.....	Tom Whitaker
Army Cup Match . . . . .	Michelle Gallagher	Canadian Cup.....	Tom Whitaker
Wimbledon Cup Match . . . . .	Michelle Gallagher	Nevada Trophy . . . . .	Tom Whitaker
Tompkins Trophy Match . . . . .	Michelle Gallagher	Leech Cup . . . . .	Tom Whitaker
Palma Individual Match . . . . .	Middleton Tompkins	Clarke Trophy.....	David Tubb
Vandenberg Cup Match . . . . .	Mike Belle	Crowell Trophy.....	John Updike
Cavalry Cup Match . . . . .	Mitchell Maxberry	Marine Corps Cup.....	Kent Reeve
Navy Cup Match . . . . .	Tom Whitaker	Porter Trophy.....	Troy Alexander

NRA National High Power Rifle Champion — Nancy Tompkins-Gallagher  
National NRA Match Rifle Champion — Nancy Tompkins-Gallagher

IMSSU World Championship Hunter Rifle — Ray Schnarre (1st Place)  
IMSSU World Championship Hunter Rifle — Jim Kinslow (3rd Place)  
IMSSU World Championship Standard Rifle — Jim Kinslow (1st Place)  
IMSSU World Championship Standard Rifle — George Lively (3rd Place)  
IMSSU World Championship Standard Rifle — Ray Schnarre (5th Place)

Doug Koenig of Albertis, PA, used Sierra 9mm bullets to capture the prestigious Bianchi Cup in Columbia, Missouri last May, narrowly defeating Ken Tapp. Doug was also a member of Team Sierra/Starline's dominating Chevy Truck Sportsmans Team Challenge squad with David Tubb and Michael Plaxco. The Sierra/Starline team captured their fourth consecutive title in 1998 and look forward to 1999.

Jamie Craig captured the USPSA Area 1 and Area 5 titles in the open class. Marvin Tannahill won the NRA Long Range Pistol National Championship in the Unlimited Standing with a new world record of 80 x 80. Richard Mishler won the Unlimited 1/2 Size and the Freestyle Aggregate. Jim Harris reigns as IHMSA International Champion in the UAS Standing and Sierra's own Carroll Pilant won the UAS Freestyle in Oak Ridge, TN.

At the 1998 NRA Rifle Silhouette Championships, 87% of the competitors were using Sierra Bullets including the Standard Rifle National Champion, Jose Antonio Benavente Pinero and Hunter Rifle National Champion Lee O'Neil.

## Die Cleaning, New & Used

*by Dave Brown*

Thoroughly reading the directions that come with your dies will be time very well spent. A good die company will often recommend the thorough cleaning of their dies before using them. Dies have a preventative film that helps protect them till they are sold. The rust preventative will need to be removed inside using a degreaser. Naphtha (lighter fluid) works fine for the metal. Inside the die you may find traces of polish and tiny particles of metal dust held by the rust inhibitor film. Cleaning will allow you to become familiar with the workings of the die, while readying it for use. After cleaning, the inside and maybe outside of the die, apply a new film of preventative oil. A good gun oil will do. Every now and then check your dies to make certain they are clean and protected against rust and crud. Cast bullet seating dies need to be cleaned more often than those for jacketed bullets. Chamfering tools should allow a bullet to seat without scraping gilding metal from the bullet. Gilding metal scrapings can occur necessitating their need to be removed from the seater die. This indicates a more acute chamfering tool is needed to prevent further scraping. Cartridge cases do not need to sparkle, but they do need to be clean enough to not carry grit or grime into the die. After trimming nickel cases be very careful to make certain no nickel flakes or slivers get into your dies. One tiny flake can scratch the die which will then scratch every case. The sizing die needs to be cleaned when cleaning the seater die. After the initial cleaning, dies for jacketed bullets can be cleaned with a product like Hoppes #9 then protected with new oil. Seater dies for cast bullets lubes with waxes will still need naphtha. Some dies will have parts that should not be oiled, so be sure to read the manufacturer's directions.

## Sierra Ballistic Technicians

**LIVE  
on the  
Web!!**

During February, Sierra will host a live forum on our web site featuring the Sierra Bullets Ballistic Technicians. You will be able to submit your questions on-line and receive answers immediately. Additionally, you will be able to observe the questions and answers from many other visitors. Notification of the exact date and time of the LIVE Forum will be posted on the Sierra Bullets web site.



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## Moly Coat Barrel Cleaning

by G. David Tubb

*(This article was written by David Tubb, president and owner of Moly Coatings, Inc., the company that is moly coating Sierra bullets. The methods and procedures utilized by Mr. Tubb are his own for barrel treatment with moly-coated bullets. The opinions reflected herein do not necessarily reflect the opinions of Sierra Bullets. However, we have been asked the question often enough that we feel compelled to offer one possible answer.)*

One of the first questions I'm asked by shooters new to using moly coated bullets is, "How do you clean the gun?" This article will address that question, as well as answer another accompanying question: "How often do you clean the gun?" I am assuming this is the first time you have used Sierra Moly Coated Bullets in your firearm. It is very important to get all the residual copper jacket fouling out of a barrel before starting with moly bullets.

Sierra bullets are coated by Moly Coatings Inc. (MCI) using the NECO process. Other coating processes and/or providers may yield vastly different results following these cleaning methods. To do that, you'll need a specialized cleaner like Sweet's 7.62 Solvent. I use a one caliber oversize brass brush (7mm brush for a 6.5mm bore, for instance). I liberally drench the brush with Sweet's every other time it exits the muzzle. I have brushed some barrels 60-plus strokes in order to remove the fouling. Finish with 2-3 patches. Now, Sweet's tends to eat up brass brushes; however, my method is considerably faster than letting the cleaner soak, and, I believe, lessens any chance for barrel damage from doing so. Likewise, you may find that using oversized brushes, especially in smaller caliber bores, reduces brush life span. To me it is a small price to pay for greater cleaning efficiency.

By cleaning with this method initially you have emptied the jacket and powder fouling from the stress cracks and tool marks inside the barrel. It will now take a few shots to recondition or re-season the bore – in other words the rifle probably won't group too well with whichever bullet you feed it (moly coated or not) until it's re-seasoned. The number of shots this takes depends on how many rounds have been through the barrel; it will take more rounds as the barrel becomes more worn. To then clean the barrel after firing Sierra Moly Coated bullets, I use one of two different methods based on the caliber. For "efficient" cartridges such as .308 Winchester, .223, .30-'06, and others where the effect of jack-

et fouling is normally not as critical as larger, less efficient rounds (7mm STW for example), I use a nylon brush liberally doused with Hoppes #9. I run this brush 15-20 strokes. This method normally results in the first and maybe second shots not going into the group, which is the same thing I would experience using non-coated bullets. Be advised that I am using match grade barrels which are stress relieved and don't have group shifts from barrel heating. On this note: I have found that lightweight factory barrels will usually "walk" (change impact point) as they heat up. These barrels will usually go another one or two rounds before shifting point of impact when using moly coated bullets.

For less efficient cartridges like 7mm Magnum, .257 Weatherby, .264 Winchester Magnum, and others where jacket fouling can affect accuracy in just a few rounds, I again am using Hoppes #9 with a snug fitting brass brush liberally coated with the solvent. It takes 15-20 strokes with an application of solvent each time the brush exits the muzzle end. If you have shot the rifle to the point that it is throwing shots from fouling you may have to repeat the 15-20 strokes with solvent. Again, the first one or two rounds will not be in the group. Following brushing with either method, I use a couple of wet patches to mop out the bore. If you're going to go shoot after cleaning, the barrel is ready as is. If you're going to store the rifle, I recommend running a wet patch through the bore before storing and another before taking the rifle out to shoot.

As for how many rounds, or how many more rounds, I can shoot using moly coated bullets, as an experiment I have run up to 450 through my 6.5mm-08 match rifle without seeing any accuracy deterioration. I find, however, that I am normally cleaning one third less often with moly coated bullets in any of the aforementioned efficient calibers. In the less efficient calibers, it's about half as often: for example, approximately every 50 rounds with a 7mm STW or every 80 with a 300 Winchester Magnum.