Another CETME document from

PERRO DEL DIABLO

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CETME Sport

CETME SPORT's ease of handling is shown clearly here where author's 12-year-old son rattles off semi-auto fire.

By Maj. George Nonte

Spanish Spitfire No Beauty But Really Does The Job

SPECIFICATIONS
CETME Sport

Maker. Centre de Estudios Tecnicios de Materiales Especiales

Type: Semi-auto mil. assault rifle

Locking: by rollers and inclined ramps

Caliber: 7.62mm NATO (.308 Win.)

Weight: (w/o mag.)—10.4 lbs.

Overall length: (w flash suppressor)—40"

Barrel length: 17.7" (4 grooves, 1-9.4" twist)

Mag. Cap.: 5 and 20 rounds

Sights: flip-up aperture rear for 100, 200, 300 and 400 meters. Scope bases permanently attached to receiver.

Stock: Wood butt with recoil pad. Metal or wood fore-end, plastic grip.

Remarks: Fitted with carrying strap and prong-type flash suppressor. This is a redesigned semi-auto version of the CETME rifle adopted by Spain and W. Germany for their armed forces.

WHEN GERMANY went up in flames, a blasted, battered sea of destruction just over a score of years ago, the role of the Assault Rifle had become clear. Reports from the eastern front, telling of the effectiveness of the MP 44 "Strumgewehr," had strongly substantiated it.

A radical departure from contemporary military rifle design, with its cast and stamped parts, the MP 44 was cheap and simple, and delivered a volume of fire hitherto beyond the capabilities of the individual soldier. Germans lucky enough to have one would sooner give up their Iron Crosses than part with the new weapon.

The MP 44 heralded a new concept. Though credited with tremendous effect against advancing Russian troops, it suffered some deficiencies. As the war ended in Berlin's blazing pyre, a new design had been conceived, and it is said that designer and drawings somehow came to rest in Spain.

Today, that basic design has reached full flower and is being produced at the CETME (Centre de Estudios Tecnicios de Materiales Especiales) arms plant in Toledo, Spain. Both Spain and West Germany have adopted it as their standard infantry rifle — in 7.62mm NATO (7.62 x 51mm, .308 Winchester) caliber.

I've spent some weeks now with two samples of the special "CETME Sport" version which is now available for immediate delivery in this country. Officials of MARS Equipment Corp. (Chicago 45, Illinois) recently climaxed over two years of negotiations with Spanish authorities with the arrival of its first shipment of this unique arm.

The 'Sport' model appears nearly identical with its purely military brother. However, it is capable of semi-automatic fire only. Extensive design changes in receiver and fire control unit prevent conversion to full auto. Military model parts designed for machine gun-type fire cannot be fitted. All this makes the rifle entirely legal, and it is sold with the blessing of the Treasury Department. Thus far, the "Sport" models are produced for MARS at the CETME developmental facility at Madrid, rather than the main plant in Toledo.

Having driven nearly 400 miles to pick up the sample guns (on a nasty, winter day, at that), I wasted no time getting them on the range. Initially, they were function fired in fast five-round bursts. Seven different lots of ammunition were used — two of U.S. military ball, two of U. S. Match (173-

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Once broken in, the samples furnished by MARS produced unusually good accuracy for the type. Group shown measures 1⅝" at a hundred yards.

CETME Sporter

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grain bullet), two of domestic hunting loads and one of Austrian NATO ball. Bullet weights ranged from 110 to 200 grains, yet all loads functioned perfectly. Eldest son had a ball, rattling shots off with startling rapidity into our favorite sand bank. He had no difficulty with the guns at all, though a mere 12 years young. Due to its balance and configuration, this design handles extremely well in hip-shooting. I once placed 12 out of 20 rounds in a six foot square panel at 100 yards with it, shooting off my hip. One characteristic of the design I find mildly objectionable showed up at this point. Fired cases are ejected, rather forcibly, high and to the shooter's right rear. Hot cases dropped as far as 24 feet away from the gun and reached a height of nearly ten feet above ground level in their flights. My first shot on Shooting Times' covered firing line produced a startling "clang!" The empty case had struck the roof with considerable force.

Satisfied that the guns were functionally perfect, accuracy came to mind. Several hundred rounds were fired from the bench at 100 yards. With the issue iron sights, our first dozen or so groups ran around five inches (MOA). One gun exhibited a preference, though not great, for Winchester-Western 150-grain Silvertips, placing them a bit tighter on the target.

At first, we were annoyed by fairly frequent flyers — about one shot in five that wanted to stray well out of the group. As firing progressed, flyers became less frequent. After about 100 rounds, they became infrequent. A result, I would say, of "breaking in" of bore and reciprocating parts. Also, I suspect that the locking rollers became more uniformly seated by then.

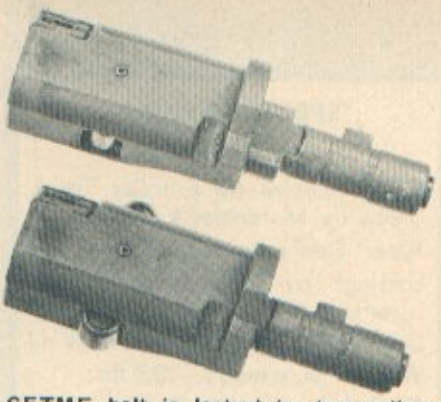
When accuracy picked up, a new Weaver K-6 was fitted in the special CETME mounts, and shooting became serious. Initial groups with scope ran under three inches, except with one lot of military ball which did very poorly. Contined shooting produced slowly improving accuracy until groups were running in the immediate vicinity of 2½ inches.

It was clearly obvious that 150-grain Silvertips were doing best, so they were used for all remaining groups. When approximately 400 rounds had been fired through the scoped gun, it delivered consecutive five-shot, 100-yard groups of 1⅞," 2 1-16", and 1⅝" respectively. This may not make the bench-rest boys take notice, but there are a lot of bolt-action sporters that won't do as well. Such accuracy is certainly more than adequate for big-game hunting.

Officials at MARS had advised me that the fired cases should not be reloaded, due to the marks left by the fluted chamber. Ten L. C. 58 fired cases were picked up off the range at random. They were resized full length and loaded with Hodgdon's Ball C-2 powder and 150-grain bullets to standard NATO velocity. The gun functioned perfectly with them, and the cases appeared to be OK for further use. I'd suggest you abide by MARS' recommendation and not reload the hulls, though I got away with it. The marks left by the chamber flutes could act as stress raisers, causing early case failure.

At this point, we'll have to say that the CETME-MARS "Sport" model is not a thing of beauty. Yet, it possesses accuracy and functional reliability at least equal to that of the average across-the-counter hunting rifle. It does, however, have a distinct aesthetic appeal to those who like functionalism without window dressing.

Mechanically, the CETME is a most interesting rifle. At first glance, it looks as if it were gas-operated. But what looks like a gas cylinder above the barrel is merely a tube in which the operating handle rides. The breech is locked by two small, hardened rollers set vertically in the sides of the non-rotating bolt head. In the locked position, these rollers engage inclined ramps in the barrel extension and are held there by a wedge-shaped member (locking piece)



CETME bolt is locked by two rollers which cam in and out according to position of tapered firing pin extension.

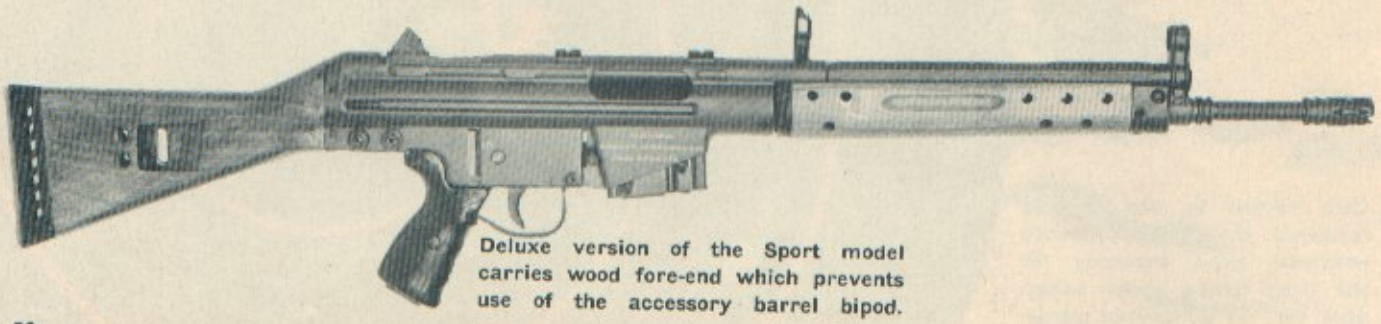
connected to the heavy bolt carrier.

When the cartridge is fired, pressure on the bolt face causes it to try to move rearward, rolling the rollers up the ramps on which they are seated. However, the locking piece resting between the rollers keeps them from moving. The angles and curvatures of the piece are such that the rollers slowly (relatively) force it rearward, gaining space in which they can move up the ramps, Thus, the heavy carrier is moved rearward by the locking piece.

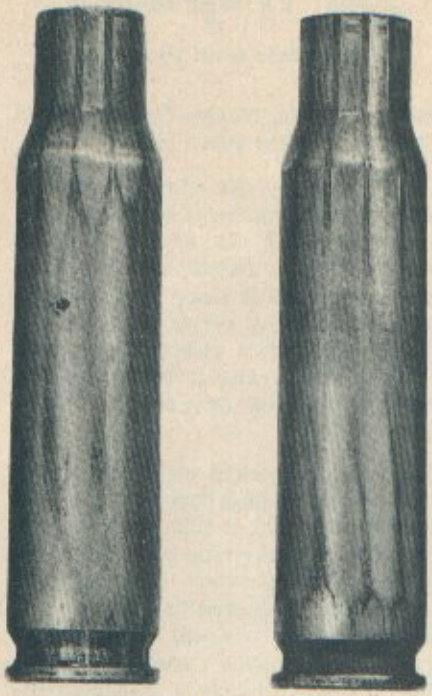
When the carrier and piece have moved about ¼", the rollers can move up the ramps into the bolt. Carrier and bolt are then free to travel rearward under the inertia gained by the former in its first ¼" of travel.

All this movement takes time. By the time the rollers are clear of the ramps, the bullet has cleared the muzzle, and chamber pressure is low enough for the case to be extracted. This system is quite simple in theory, but requires very careful balancing of recoiling components to insure reliability.

Locking occurs just the reverse of unlocking outlined above. When the operating handle is released, the carrier is driven forward by the mainspring. The bolt head strikes the barrel face and stops. The carrier continues on for ¼", during which the locking piece drives the rollers out to seat on their ramps. Simple.



Deluxe version of the Sport model carries wood fore-end which prevents use of the accessory barrel bipod.



Austrian cartridge case, (L) is of harder brass, does not flow into flutes as much as case of US military rounds.

Feeding, firing, extraction, ejection, cocking and firing are all accomplished in more or less conventional fashion.

Construction of the gun utilizes steel stampings ('pressings,' to our European friends) and precision castings to the maximum extent possible. Cursory examination indicates only the bolt assembly, carrier, barrel and barrel extension are machined. There are numerous weldments on the receiver and trigger housing. Even the machined carrier is made of two parts welded together. The sport model carries male dovetail scope mount bases on top of the receiver. These, too, are welded in place. All of the welding, I might add, is beautifully done.

MARS' standard model uses a wood buttstock and a plastic hand grip—all else is metal. The butt is fitted with a black conventional rubber recoil pad. You may, if you like, order the gun with a wood fore-end. However, with it in place, you'll not be able to fit the accessory folding bipod.

The cocking handle may seem strange at first — it sets on the left side, midway between muzzle and receiver. It folds down against its housing but is easily grasped. It does not move with the bolt, but remains latched forward, except when in use. Incidentally, this type action requires that the bolt be allowed to slam forward under the full force of the recoil spring. If eased forward, the bolt will not lock.

Typical European scope mounts are employed. High rings attach to the bases by transverse lock screws and compression clamps. A large hole is cut through the lower portion of each ring to allow use of iron sights when the scope is in place. The large objective bell of the Weaver K-6 partially obscures the iron sight picture. However, smaller scopes should leave plenty of clearance. This high mounting is contradictory to U.S. tastes, and my personal liking — but it does have some advantages in that iron and glass sights are instantly available, without adjustment.

The gun is furnished with two five-shot magazines, a carrying sling and a small pull-through cleaning kit housed under the front sight. If you must be real gung-ho, 20-shot magazines are available for $7 each. An excellent instruction manual is also packed with the gun.

Disassembly is a snap. Using a bullet point, press out two pins (at lower rear of receiver) and slide off the buttstock. Hammer should be cocked. Ease the bolt back about half way and press out the pin ahead of the trigger guard. The complete fire control group (trigger housing) can then be pulled off, and bolt and carrier will slide out the open rear of the receiver. That's it, and assembly is done in the reverse order.

Bolt head and firing pin can be removed from the carrier by rotating head and pulling it out. Refer to the manual for this, since it is almost necessary to have the bolt-carrier unit in hand to understand the movements. Normal cleaning can be accomplished without removing the bolt head.

From a design view, the action is entirely safe. The firing pin cannot reach the cartridge unless the bolt is fully locked. A manual safety pivots on the left side just above the trigger. Down is "fire," up is "safe."

In the final analysis, we feel the CETME-MARS "Sport" is a safe, reliable and accurate arm. Its purely functional military look militates against it among those who prefer sleek, classic sporter lines. That is all a matter of taste, though. Performance of this gun is fully as efficient as the slickest, trimmest autoloading sporter. In fact, military requirements for durability and reliability far surpass those applied to our domestic sporting fast-firers.

Th's isn't a cheap gun at $219, but the shooter to whom it appeals will get his money's worth.

Basic CETME arm disassembles into these component parts without tools. A loaded round is all you need.

Scope mount designed for MARS by CETME consists of typical European high rings that allow use of irons.