

## BOARDING THE

# Heym Express

A new magnum-length action designed for the world's most potent cartridges. Plus, it's the first factory rifle chambered for the new .338 Lapua Magnum!

By Jon Sundra.

isn't often that we get the opportunity to play around with a truly new rifle and cartridge. Usually if it's a new rifle it's chambered for an existing cartridge and if it's a new cartridge, it's chambered in an existing rifle.

A refreshing exception turned up recently in the form of the Heym Express, a slick new turnbolt based on a true magnum action and chambered for the .338 Lapua Magnum.

When initially unveiled at the '89 SHOT Show the Heym Express was to be offered in eight chamberings, the smallest of which was the .375 H&H. The others — consisting of the

.378 Weatherby, .404 Jeffery, .416 Rigby, .450 Ackley, .460 Weatherby, .500 Nitro Express and .500 A-Square — testify not only to Heym's obvious commitment to the Dangerous Game Rifle (DGR) genre, but also to the revived interest in big bore rifles in general. Obviously, the addition of the .338 Lapua Magnum is a new development that has come on the scene since Heym's announcement of the Express.

I'm not really sure what triggered the current wave of interest in big bore cartridges but it's been going strong for the past five years. Of all rounds both commercial and wildcat, probably none has generated more

interest than the old and highly revered .416 Rigby, a cartridge that dates back to 1911. The Rigby was (and is) unique in many ways, not the least of which is its sheer size; it required Mauser to produce a special action, the No. 20, just to accommodate it.

Lengthwise, the Rigby case isn't much longer than the .375 H&H, but its head diameter is a nominal .582 or roughly .070" Ionger than that of a standard belted mag-

With this renewed interest in the Rigby and similar big bore rifles and cartridges, old Oberndorf Magnum Mauser rifles (or actions alone), have become precious. There has also been a coat-tail effect that has tweaked interest - and prices - of other magnum actions like the old French Brevex and the Czechoslovakian Brno .602, both of which can also digest the over-sized Rigby round or any wildcat based on it, including the Weatherby .378/.460 case, which is nothing

more than the Rigby hull fitted with

a belt.

There has, however, been a far greater demand for true magnum actions than there was supply, so custom and limited production makers like David Gentry, Dakota Arms, Kimber and Royal Arms to name four, came out with their own variations of the Magnum Mauser. And with Ruger and Heym of Germany joining the fray, big bore enthusiasts now have a choice of at least eight true magnum actions, counting the old Mauser and Brevex, and the Weatherby Mark V.

The Heym Express shares the same basic mechanics as all the other magnum actions to surface of late, save the Mark V, in that it features the controlled-round feeding system of the Mauser. Confident that most GUNS readers are aware of the basic differences in controlled round feeding as opposed to the push-ahead system employed by virtually all non-Mauser type rifles and the reasons why it's the preferred system on which to base a dangerous Game Rifle, I'll not belabor the point. Suffice to say the Heym's large, non-rotating extractor takes control of the case rim the moment the cartridge pops free of the feed rails.

When it comes to ejection, however, the Express departs somewhat from both the Mauser '98 and from the pre-'64 Model 70 variation thereof which is being used by all the aforementioned makers of magnum actions save Weatherby. All place a static, pivoting ejector in the 7 o'clock position in the floor of the receiver bridge so that the left locking lug needn't be bisected as on the Mauser. A slot on the side of the bolt head allows passage of the ejector arm to contact the case rim, thus tossing the empty clear of the port simply by virtue of its rearward motion (inertia) being abruptly stopped by con-

tact with the ejector.

If there's a disadvantage to the Winchester system it's that the bolt face must still be slotted for passage of the ejector arm. The Heym, on the other hand, avoids slotting the bolt head entirely by employing a pin not unlike that used in the plunger-type ejection systems seen on most of today's rifles. However, the Heym differs entirely in that the ejector pin is spring loaded to keep it withdrawn from the surface of the bolt face until its rear surface contacts the ejector near the end of the bolt's rearward travel just before the left lug contacts the stop. It is still, therefore,

inertia or mechanical ejection, but it's achieved through the ejector contacting the rear of the pin rather than the case head directly. The side of the bolt head must still be slotted for the ejector arm, but on the Heym it need not be extended into the bolt face.

This unique variation on the inertia ejection theme was just recently incorporated into the Heym Magnum. Originally, Express rifles and actions (the latter are sold separately for the princely sum of \$3150) did indeed have the Model 70-type ejector and the slotted bolt head.

Because this action was designed specifically around the world's largest and most potent cartridges, a lot of thought was given to the problems attendant with heavy

recoil. I don't mean from the shooter's perspective but rather that of taking adequate precautions to preclude stock splitting.

> The easiest and most traditional approach to stocking big bores calls for a second recoil lug to be affixed to the underside of the barrel some several inches ahead of the receiver so that recoil forces are divided up among the two. Considering that the conventional, receiver-mounted recoil lug delivers all force to what is a relatively thin web of wood between it and the magazine mortise, a second, forward-mounted lug can actually handle far more recoil with far less likelihood of splitting than can the rear one, crossbolt reinforced or not. Since Heym was starting with a

clean sheet of paper in designing the Express, they looked at alternative solutions. What they came up with was a unique system where-

As originally shown the Heym Express featured Model 70-type ejection which required an ejector slot in the bolt face as shown here. It has since been replaced with an ejector pin.

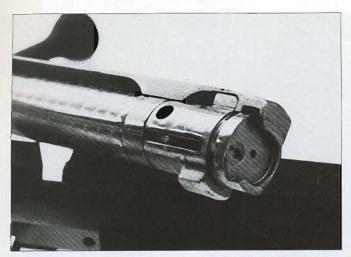
by recoil is transmitted to the stock via two vertically-oriented abutments on either side of the magazine box. Together these two abutments have about 50 percent more surface area than a conventional recoil lug located beneath the receiver ring. Moreover, the wood backing them up is the solid buttstock itself, not just a web of wood.

It's a deceptive arrangement because upon removing the barreled action from the stock, there is a conventional-looking recoil lug just where you'd expect it: on the bottom of the receiver ring. Instead of this lug being backed up by the web of wood, however, it abuts a lip at the forward edge of the magazine box and it is through this lip that the entire recoil force is transmitted to the stock.

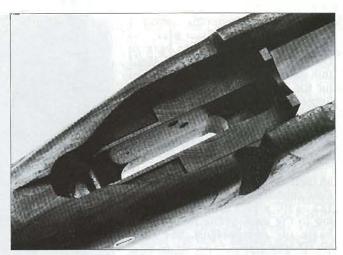
Obviously, the magazine has to be extremely strong and rigid. When removed from the stock and reassembled, the action looks massive, even clumsy. That impression, however, is due strictly to the bottom metal which together with the stock, accounts for 41/2 pounds of the gun's total 11-pound weight. The receiver itself is a thing of beauty, trim and light in weight.

The trigger guard bow is separate; it's forward surface has a slot that engages and hinges upon a cross pin at the rear of the box and is secured by the rear guard screw.

It is rather unusual, I think, that the Heym sports a Timney trigger; as such, it's fully adjust-able and nestled in a housing of machined aluminum. The bolt body measures .775 which is roughly .080 larger than a standard



The ejector arm acts upon a spring-retracted pin fitted into bolt's face rather than the case head, precluding slotting the bolt head.



Unique recoil shoulders behind the Heym's magazine box direct the recoil forces to the stock, hence the massive bottom metal.

'94, Ruger 77, Remington 700, etc. The shroud at the rear, which houses a Model 70-type 3-position safety, is wide enough to seal off the lug raceways at the rear of the receiver bridge. Gas venting is courtesy of a .200" diameter hole exactly one inch behind the bolt face, and another of similar size on the right side of the receiver ring.

By moving the safety to its middle position the bolt can be withdrawn from the receiver and the striker assembly removed; no tools are required. The striker assembly is exactly that: a striker that contacts a separate firing pin that floats in the bolt head where a mild coil spring keeps it withdrawn.

Bolt travel is 51/4" and the maximum overall cartridge length that can be accommodated in the magazine is 3.75. At the front of the magazine is another unique feature which Heym calls a cartridge buffer; it's a spring-loaded plate that pushes the rounds against the rear-of the box as it's being charged. See accompanying story by Tom Turpin — Editor.

Cosmetically, the Heym folks have carried out the express rifle theme very nicely. The flat-bottomed, flat-sided receiver sports a double flat-top a la Magnum Mauser. The rear sight base affixed to the 24-inch barrel holds one fixed-blade V-notch with vertical white line, plus two folding, notched leaves for finer sighting at 100 and 200 yards. The front sight isn't the best looking I've seen but it more than makes up for that by its functional practicality. A huge 1/8-inch double-sided white dot is integral with a 1/4" diameter threaded bolt.

Elevation adjustment is accomplished by simply turning the screw in or out. It's an excellent arrangement, sturdy, highly visible and quick to use. It's a much better system than having to file the notch of the rear sight, which is then good for only one specific load and distance.

The stock is in keeping with what one has a right to expect on a 3,700-dollar rifle. The *American* classic-style stock on my test rifle was of nicely figured French walnut with beaded cheekpiece and rosewood forend tip. I stress "American" because so many German gun makers are either incapable or unwilling to make the necessary styling concessions required to sell guns in our market. Heym is an exception, not only with their Express model, but with their bread and butter SR-20 which in more mundane calibers is offered in three models sporting stocks that look right out of the mainstream of contemporary custom rifle styling.

Beautifully done 22 LPI checkering in a classic point pattern and a brown rubber recoil pad complete the ensemble — well, almost complete it. The blued steel grip

cap houses a trapdoor in which a spare front sight and a spare firing pin are housed. Neat!

Because the barreled action bottoms literally on flats that are integral with the massive bottom metal I spoke of, only the barrel is bedded, and in fiberglass at that. In other words, the entire length of the barrel channel is glassed.

My test gun was equipped with a Leupold 1.5-5X variable in Apel QD mounts. A simple lifting of the locking lever on the right side of the rear base allows the scope to be rotated 90 degrees to the right and disengaged from its front dovetail for iron sight use.

The .338 Lapua: As for the new .338 Lapua for which my test rifle was chambered, it's one hotrock of a car-



The only ammo available to Jon for testing was Lapua's factory load which had a 250-grain FMJ military bullet ahead of an 87-grain charge of powder. A muzzle velocity of 2785 fps was far short of the claimed 2950, though it should easily be achieved.

tridge that has seemingly come out of nowhere. Those of you who read my June Rifleman column here in GUNS will recall that I talked about this cartridge which was developed for the military as an experimental long-range sniper round by Lapua of Finland. The cartridge is based on a slightly shortened version of the .416 Rigby case, hence requiring a magnum action like the Heym.

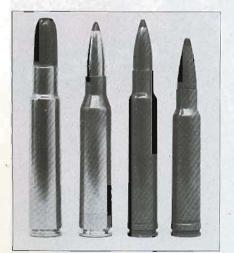
By slightly I mean two-tenths of an inch shorter than the Rigby hull. Case capacity is reduced from about 123 to 107 grains of water (measuring to the base of the neck.) As a basis for comparison, the .340 Weatherby has a capacity of 92.5 grains or some 13 percent less.

The only ammo available is Lapua's own and only in 250-grain full metal jacket — obviously the load they had worked up for martial

applications. The ballistic data which appears on the box lists muzzle velocity at 900 meters per second which works out to 2950 fps at 4830 foot pounds of energy. My Oehler 35P, however, showed an average MV of 2785. Considering that Weatherby lists 2850 as the MV for their

250-grain .240 loading (that's in a 26-inch barrel), it would seem that this lot of factory fodder is a little down on power. Considering that the Lapua case has a 13-percent larger boiler room, a nominal MV of around 3000 fps should be attainable.

In light of my getting only one box of ammo with the gun, and continued on page 79



For size comparison the parent .416 Rigby case is shown at the far left next to the .338 Lapua. Next is the .340 Weatherby and the .338 Winchester Magnum, neither of which requires a true magnum action.



## INSIDE HEYN'S BIG BORE HEYN'S EXPRESS

GUNS Special Projects Editor Tom Turpin is President of Heym, America. We asked him to give us an inside look at the development of the new rifle, and some feedback on his own Heym Express, a .416 Rigby.— Editor

By Tom Turpin • Photos by Mustafa Bilal

he fact that practically all the premier rifle makers in the world began their products with a Mauser made action speaks well for the quality of the construction and brilliance of the original design. John Rigby, Westley Richards, Holland & Holland, and other makers of best quality bolt action rifles, all used Peter Paul Mauser's product.

Mauser, of course, ceased production of the superb '98 type actions many years ago. There were hundreds of thousands of military Mausers left over from the big war and many of these were converted into fine sporting rifles.

This works fine for standard (.30-06) length cartridges, as the vast majority of the '98 type Mauser actions are superb actions. However, when it comes to very long cartridges, or, very short ones for that

matter, one must find one of the original short or magnum length actions, turned out by Mauser for the commercial market.

Another alternative is to hire one of a handful of outstanding metal-smiths to either lengthen or shorten a military action, an expensive proposition. A third alternative is to find someone like Fred Wells of Prescott, Arizona, and have him build you an action from scratch. Needless to say, this alternative is also very expensive. But then, so is buying an original Mauser action in either the long or short versions, if one can be found available for sale.

Now there is another option. German rifle manufacturer F.W. Heym is building a magnum length action commercially that is almost a copy of the original Mauser. When I say that, I am referring to the action itself. There are extensive changes

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there not being enough time to get reloading dies made up, my bench session was brief to say the least. Using three rather than five-shot groups, accuracy was better than I expected, even from a 3,700-dollar rifle. My first group from a clean barrel went 17/8", then the gun settled down and produced five, three-shot groups that averaged exactly one

Before firing the last group, I removed the scope and replaced it. When the target was superimposed upon the previous one, the resultant 6-shot group measured 11/4. Obviously the Apel mounts work well.

All in all the Express performed like one has a right to expect of such an expensive gun. Feeding was smooth, extraction spirited, trigger action crisp and light, and the safety moved silently, positively. The oil-finished stock was very well done both inside and out.

On the downside, the wrist and forearm are just too thick for my medium-sized hands; I could live with it as is but would much prefer to see both dimensions reduced in circumference. On the other hand, the footprint of the butt pad is too small for the calibers for which this gun is intended. I'd like to see the butt a little broader and deeper to spread the recoil over a larger area.

An then there's the weight — 11 or so pounds of it, which can be laid entirely at the door of the Express's bottom metal. Were they to abandon the current system and replace it with a conventional, Mauser-type integrated box/guard bow and place a second recoil lug up on the barrel, Heym could greatly broaden the appeal of this action among the custom gunsmiths of the world - and save a pound to boot.

As for the .338 Lapua, I'm afraid that unless they can squeeze another 150 fps out of it, there's no justification for it; not when you can match it with a .340 Weatherby and in a rifle that doesn't need a true magnum action to accommodate it.

In addition to the Express, Heym of Munnerstadt, Germany, offers an extensive line of quality rifles, shotguns and drillings. Heym firearms are now being import-ed into the U.S.A. by Heckler & Koch. For more information on the Express, or any other Heym firearms, contact H&K, 21480 Pacific Boulevard, Sterling, Va. 22170-8903.

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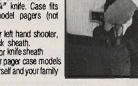
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