The .460

- *Roy Weatherby's biggest Magnum*

by Hans Bossert

Hans Bossert takes aim with the .460 Weatherby.

A full-length view of the .460 Weatherby Mark V.

Since the early 1970s, I have had a large, impressive-looking cartridge in my collection. When I bought the single .460 Weatherby Magnum round, I never would have dreamed to ever actually fire and much less own a rifle chambered for it. In 1996, however, my school friend Fred in Switzerland asked me whether I would be interested in shooting a .460 Weatherby Magnum rifle, as he had one standing in the rack of his shop, but the customers only ever thought of it as an interesting conversation piece and not something to spend money on. I, however, being a big-bore aficionado, didn't take long to decide and asked Fred to send it to Australia.

The .460 is the second of Weatherby's

A .460 Weatherby with a Pendleton muzzle brake.

Magnums inspired by the .416 Rigby case. When Roy Weatherby began the development of his big .378 Magnum during the early 1950s, he basically necked the Rigby case down, modified the shoulder to a double radius design and added a belt.

In 1958, five years after introducing the .378 Weatherby Magnum, Roy opened the neck to .458" and called it the .460 Weatherby Magnum. His then latest design was possibly inspired by Winchester's introduction of their successful .458 Magnum two years earlier or perhaps by experimenters such as John Buhmiller, a gunsmith and hunter from Montana in the USA. John took a necked-up .378 Magnum that he called the .45 Weatherby to Africa in 1956 to shoot buffalo and marauding elephant.

Looking through the Weatherby book, *The Man, the Gun, the Legend*, and checking the serial numbers against the manufacturing dates, it substantiated that my rifle was made in Japan in 1988 and was designated 'Euromark'. It is stocked with a well laid out, straight-grained, typical, love 'em or hate 'em Weatherby Monte Carlo walnut stock with a rosewood fore-end tip and pistol grip cap and is protected with a satin urethane finish.

Like all Mark V rifles, the wrist of the .460 Weatherby Magnum is internally reinforced with an aluminium rod. The stock has three areas of plastic bedding: around the extra recoil lug on the barrel, behind the action recoil lug and at the rear of the magazine. These reinforced areas, plus the extra barrel lug, assure that the stock will not split under the heavy recoil of the big cartridge.

Most shooters would be familiar with the standard Mark V action, but few have examined and handled a Mark V rifle >

A .460 Weatherby Mark V with scope.

in the .460 Weatherby Magnum calibre. Basically, the standard Mark V action and the one used for the .460 cartridges are the same, with the greatest difference being in the magazine set-up for the big rounds. For all other Weatherby Magnum cartridges, the magazine is of the usual Mauser type, with the cartridges staggered in the magazine box and with the follower designed to hold the top cartridge against the side of the magazine box and tight under the receiver rail.

For the .378, .416 and .460, the magazine takes the cartridges in a single column. They are fed from a flat follower straight forward from between the lips of the magazine box and do not touch the receiver. Magazine capacity is two of the big rounds, compared to three in the smaller, standard Magnums. The magazine lips are quite stiff and a little bit of effort is required to load the cartridges from the top. When charging the magazine, one has to take care and avoid canting the rounds; otherwise, they can stick awkwardly and tightly between the lips and it can then be a bit of a struggle to free them again. All of this is not something to be commended in a dangerous-game rifle. What this rifle really needs is a properly proportioned staggered column Mauser-type magazine holding

The locking lugs from a .460 Weatherby Mark V.

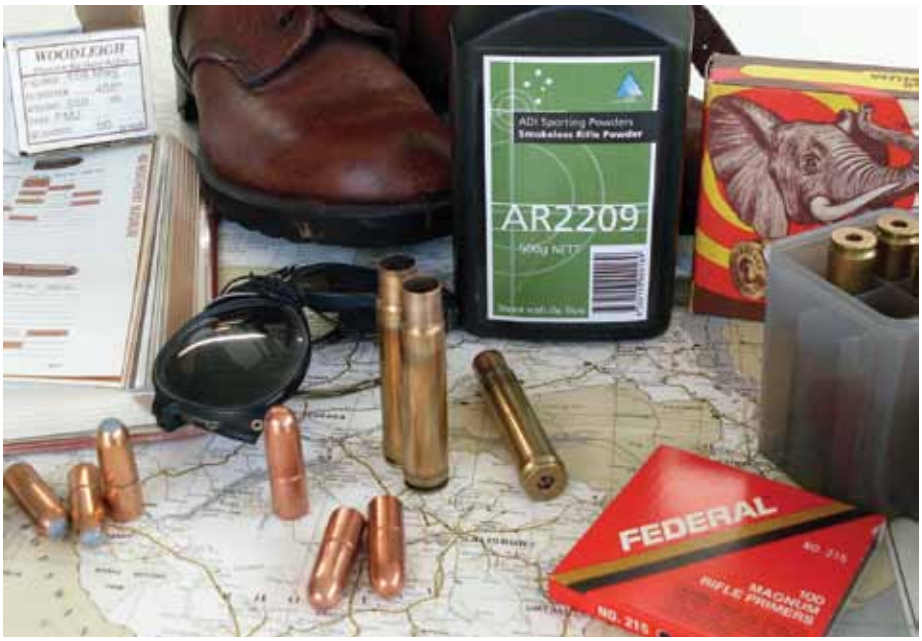
The bolt from a .460 Weatherby Mark V.

three rounds. It could then be loaded much more quickly without having to look down and concentrate on keeping the cartridges level with the lips.

As an alternative, it has been suggested that the magazine, being single column, can be loaded from the bottom by simply opening the floorplate. I found this to be very cumbersome and totally useless in the field. To be able to eject unfired cartridges, the receiver ring has a semicircular notch cut out on the top right-hand side. If this notch was not present, it would be impossible to eject the 95mm-long cartridges.

The rifle's metalwork is bead-blasted and matte-blued to a low-lustre finish. It has a clean 26"-long barrel with an integrated Pendleton-type muzzle brake. The latest .460 Mark Vs have a screw-on muzzle brake; I find that the older built-in type looks better though.

I mounted a light 1.5x20mm Leupold scope that stands up well to heavy recoil, has very long eye relief and is guaranteed for life. The .460 Weatherby Magnum was originally said to reach a muzzle velocity of 2700fps with a 500-grain bullet, producing muzzle energy of 8092 ft-lb. The factory, however, has revised that figure down to 2600fps with corresponding energy of 7500 ft-lb.



Reloading components for the .460 Weatherby.

I have done a fair amount of handloading with the cartridge, mainly using Woodleigh Weldcore bullets, and the accuracy has generally been better than expected. The choice of cases is simple, as all are made by Norma. The Federal 215 Magnum primer was originally designed expressly to reliably ignite the large powder charges used in the .378 Weatherby cartridges; thus, these were used exclusively for all load developments.

Despite the size of the case, the .460 Weatherby Magnum has a relatively high expansion ratio. This calls for powders in the medium to slow burning range, with AR2208, AR2209, AR2213SC, IMR 4350, IMR 4831, Reloder 19 and W760 being excellent choices.

Plenty of load data exists for the 500-grain projectiles, so I won't delve too much into this. I was mainly interested in what could be achieved with the impressive 550-grain Woodleigh bullets. These long 550-grain projectiles have a very high sectional density of .375. The soft-nose bullet measures 36mm in length, while the full metal steel jacketed ones measure 38.4mm. The long FMJ should give sufficient penetration in large game such as buffalo and elephant.

The obvious powder to start with seemed to be AR2209, so 109 grains of this was loaded to generate a muzzle velocity of 2300fps with the 550-grain FMJ bullet and a compressed charge of 112 grains delivered 2370fps, which was the highest velocity obtained during testing. Next, I tried 120 grains of AR2213SC and the soft-nose bullet reached 2350fps. When fully seating the 550-grain FMJ on the same 120-grain charge, it caused a bulge near the case shoulder and therefore could not be chambered.

A .460 Weatherby with a 100-yard target.

The AR2208 was a bit of a surprise - 100 grains of it produced 2350fps in the FMJ bullet, with an easy bolt lift and no apparent signs of excessive pressure as far as I was able to tell. I also tried loads containing Reloder 19 and VVN 160 with similar results. I fully expected to reach 2400 to 2450fps with these projectiles as the ADI booklet lists maximum loads with 600-grain bullets at around 2450fps by using 104 grains of AR2209 or 115 grains

of AR2213SC. However, it seems impossible to obtain these speeds in my rifle with the powders on hand. Nevertheless, I believe what I accomplished is more than adequate to harvest any animal on this planet with a well-placed shot to a vital area, so an extra 100fps won't make a difference.

All of these 550-grain bullet loads generate a calculated free recoil energy of around 100 to 110 ft-lb. My .458 Ruger M77 loaded with 500-grain bullets at 2100fps generates about 60 to 65 ft-lb. To put that in perspective, your average 8lb .308 Winchester creates about 17 ft-lb. The recoil during test firing was absorbed by a Caldwell Lead Sled Shooting Rest with a couple of bags of lead shot on the tray. To shoot the loads like that was not uncomfortable; I believe that this device should be high on a must-have list for big-bore fans who like to experiment with heavy recoiling rifles.

Also assembled were some 'shooter-friendly' loads with the 500-grain Woodleigh soft-nose bullet. What I was looking for was a muzzle velocity of about 2350 to 2400fps, which I find to be a good low-pressure working load. In other words, I wanted to duplicate the recent rimless .450 Rigby. I found 110 grains of AR2209 to be right in the ballpark of these figures; 100 grains of AR2208 and 118 grains of AR2213SC was also good. These loads were fired in the normal bench rest fashion and while the recoil was still heavy and comparable to a .458 Winchester Magnum without a brake, the muzzle jump was not nearly as bad.

A good, light load with a 400-grain bullet is 100 grains of AR2206 powder, which produces 600fps muzzle velocity. A real zinger is 112 grains of AR2206H behind

A .45-70, left, .458 Winchester Magnum and .460 Weatherby Magnum.

a 350-grain bullet for an even 3000fps. Shooting the rifle offhand in Big Game Rifle competition with these 350- and 400-grain bullet loads is nearly a pleasure and it certainly attracts the attention of the other shooters when it goes off.

If this rifle was equipped with a straight-combed stock that was low enough to use comfortably with a good set of open sights (which should be fitted as standard on a dangerous-game rifle anyway) and if it incorporated a Mauser-type magazine holding three rounds, it could still be used effectively with a telescopic sight affixed with a quick-detachable mount and would surely rate as a classic. I have never found a rifle stocked this way to be difficult to use with a scope. In fact, I have found quite the contrary; the head is held more upright, target acquisition is very fast and your cheekbone is not pounded by the comb.

To sum it up, the .460 Weatherby Magnum is a nicely balanced cartridge that takes well to slightly reduced (from factory ballistics) loads with heavy bullets and handloading the big cartridge isn't any more difficult than handloading for the .30-06. ●

A comparison of projectiles, including a 300-grain Hornady, left, 300-grain Taipan, 350-grain Hornady, 400-grain Speer, 500-grain Woodleigh, 550-grain Woodleigh and 550-grain Woodleigh FMJ.

.460 Weatherby Magnum load data

Bullet (grains)	Powder	Charge (grains)	Muzzle velocity (fps)
350 soft-point	AR2206H	112	3000
400 soft-point	AR2206	100	2600
500 soft-point	AR2208	103	2400
500 soft-point	AR2209	110	2380
500 FMJ	AR2209	110	2400
550 soft-point	AR2209	110	2350
550 soft-point	AR2213	120 comp	2350
550 FMJ	AR2208	100	2350
550 FMJ	AR2209	112	2370