

No. 32 Telescope Sights



Red Star Mountain (RSM) is very pleased to be able to offer one of the most highly used and sought after vintage military optics; the British designed, developed and used No. 32 series. There is much written about this optic and due to this, we do not suppose this document to be historical in nature, rather we present this document as “informational” only. While we do manufacture reproductions of the No.32 MK2 and MK3 we do not profess ourselves to be experts in this optic, instead we have studied samples of these optics as well as researched what we could in order to develop the best product possible.

It should be noted that while we manufacture reproduction optics, we do not have availability to the weapons that these optics were used on and therefore cannot test fit or actually fire weapons with these optics mounted. That said, we have a very board customer base located in many countries where there is availability to weapons and many of our customers have successfully mounted our products and shot the weapons with them and have subsequently reported back to us that the optics have performed exceptionally well.

THE EMERGENCE OF A LEGEND

In the years leading following WWI and leading up to WWII, the British had determined that they were in need of optical sighting devices for use on some of their weapons. Specifically, they decided that they wanted an optic for the Bren LMG and thus they began development of such a device. About the same time there was an effort to develop a better more capable sniper rifle. As the No.4 MK1 (T) was developed, it too needed an optic so naturally the powers that be decided to use the new optic (No.32 MK1) for both platforms and thus set about to make a mount that would allow the optic to be mounted on either weapon.

For reasons that may never be known, mounting an optic to the Bren LMG fell by the way side but proceeded with the No.4 MK1 (T) and thus the No.32 MK1 was developed, trialed and produced. The No. 32 Mk 1 rifle optic was adopted for use on the sniper rifle in 1941 and entered service in 1942, however there was an almost immediate outcry from the users (snipers) that there were issues with it. First off, they found that the adjustments were too coarse for accurate shooting especially at extended ranges; additionally they discovered that the rear sun shade was potentially dangerous in that if the shooter did not establish his eye relief carefully, he would be rewarded with a very serious cut above his eye when firing the weapon.

Subsequently, in 1943 the No.32 MK2 was developed that offered the sniper with a more finite adjustment over the MK1 which allowed more precise target engagement and was a welcome improvement. Unfortunately, the rear sun shade remained in addition to the very difficult method of zeroing the optic. Even while the MK2 was moving into production, engineers were working on a method to solve the issue of zeroing the optic and subsequently came up with a method that eliminated the requirement for tools. Initially, this new drum/turret set up was set to be used on an entirely new optic, the MK3 however it was determined that it could be adapted to the MK2 which it was and the MK2/1 was the result in 1944.



While the MK2 was being upgraded to the MK2/1, engineers had already developed a brand new optic which would become the No.32 MK3. It is worth noting that there were a number of other improvements which were considered and applied in one form or another as well, specifically a waterproof variant was developed and optics that received this treatment has a “W” painted onto the tubes to identify it. Additionally there was an attempt to increase light transmission through what was called “blooming” of the lenses. Optics that received this treatment had an identifying mark which was a “B”.

The MK3 was put into service in 1944 and addressed most if not all of the issues cited by snipers of the era, most notably was the issue of the rear sunshade which was removed for the MK3. Actually, the sunshade was said to have been removed from some of the MK2 optics as well previously. Additionally, the MK3 had the simplified zeroing procedure wherein no tools were required to slip the drums. The MK3 did have one major change which was that the elevation (ranging) turret and windage (deflection) turrets were put into alignment, thus the MK3 can easily be identified from the earlier MK2 and MK1 versions.

The No.32 MK3 remained the mainstay sniper optic until the late 1960’s when a new rifle was developed; the L42A1 which was a converted/modified No.4 MK1 (T) rechambered in 7.62x51 NATO. This new caliber required different drums on the MK3 to compensate for ballistics, this modified MK3 was given a new nomenclature; L1A1.

Here is a very simple matrix which depicts some of the similarities and differences between the various models of the No.32 telescope.

ISSUE	MK1	MK2	MK2/1	MK3 (303)	L1A1	NOTES
Platform used on	No.4 MK1 (T)	No.4 MK1 (T)	No.4 MK1 (T)	No.4 MK1 (T)	L42A1	
Date entered service	1942	1943	1944	1944	1970	
Comments	<i>The MK1 was originally intended to be used on both the Bren gun (MG) and then carried over to the No. 4 MK1 (T) sniper rifle, however it was never actually used on the MG</i>	<i>The MK2 featured anti back lash springs and finer adjustments than the MK1</i>	<i>These optics were actually MK2's upgraded new drums. Some were recalibrated for 7.62 and used for the L42A1 program</i>	<i>Completely redesigned from the MK1 and MK2. Uses the drums from the MK2/1</i>	<i>The L1A1 is a No.32 MK3 (or MK2/1) recalibrated for the 7.62 NATO round. Elevation drum marked "M" for meters</i>	
Rear sun shade	Yes	Yes	No	No	No	<i>The rear sunshade was removed from most of the MK1 and MK2 optics in 1947</i>
BDC calibration	.303	.303	.303	.303	7.62 NATO	<i>.303 calibration was based on 174 grain round, 7.62 NATO calibration was based on 155 grain round</i>
Elevation drum markings	0 - 1000 yds w/100 yd increments)	0 - 1000 yds w/50 yd increments)	0 - 1000 yds w/50 yd increments)	0 - 1000 yds w/50 yd increments)	0 - 1000 yds w/50 yd increments)	<i>The MK1 is capable of indexing 50yd increments but the position is not marked on the elevation drum</i>
Windage drum markings	16 MOA (L&R)	16 MOA (L&R)	16 MOA (L&R)	16 MOA (L&R)	16 MOA (L&R)	
Elevation adjustment	2 MOA (50yd)	1 MOA	1 MOA	1 MOA	1 MOA	
Windage adjustment	2 MOA	1 MOA	1 MOA	1 MOA	1 MOA	
Elevation MOA	49	49	49	49	60	
Windage MOA	16	16	16	16	16	
Tools needed to slip the scales to zero	Yes	Yes	No	No	No	<i>The MK3 provided a small hole in the elevation and windage drums that allowed the shooter to insert a bullet point and rotate the drum to read zero</i>
Water Proof	No	No	Some	Yes	Yes	<i>Water proof scopes were marked with a red "W" to indicate it had passed inspection</i>
Bloomed lenses	No	Some	Some	Yes	Yes	<i>MK2 and MK2/1 optics with bloomed lenses were marked with a "B" (painted on)</i>



THE RSM SERIES

RSM determined that there was a desire for quality reproductions of these optics and set about developing them. Given that engineering drawings and technical data was not available, RSM carefully studied samples of this optic, conducted what research they could and developed variants of the MK2 and MK3 optics. It must be understood that due to factors out of their control, RSM could not installed and test the optics as would be the natural procedure in a western country. RSM relied on trusted sources and its customers to field test all of its products having built them to as close to the original designs as they can manage. Subsequently, over time RSM has determined that their products are well designed and constructed and can be used with confidence by hobbyists and collectors the world over.

RSM take optics manufacturing very seriously and as such does everything it can to build accurate, dependable and robust vintage optics. It should be remembered that optic technology of the past was nowhere near it is today, therefore many vintage optics as well as reproductions of those optic do not compare to modern models. RSM sincerely hopes that is customers appreciate and find pleasure in using its products. RSM believes that its products closely resemble the originals; however it is constantly upgrading attributes as well as production materials and methods ever striving to manufacture the best product it can.

For those interested in the No.32 optic, RSM highly recommends further research and study, some relevant publications include but are not limited to;

- The British Sniper, British and Commonwealth Sniping and Equipments 1915-1983 by Ian Skennerton
- The British Sniper, a century of evolution but Martian Pegler
- Telescope Sighting No. 32, An inside view of the snipers rifle telescope by Peter Laidler