

CIVILIAN MARKSMEN EVALUATE THE M14 RIFLE

Opinions on the M14 rifle formed by a group of high power rifle competitors who fired the rifle at targets over several months

DURING the April 1961 meeting of the National Board for the Promotion of Rifle Practice (NBPRP), it was suggested by Adm. Morton C. Mumma, NBPRP member and past president of the National Rifle Association of America, that the M14 rifle be evaluated from the civilian viewpoint by a panel of qualified NBPRP and NRA shooters.

With the approval of the Under Secretary of the Army, rifles were lent and ammunition supplied to 10 high power rifle marksmen selected by the Executive Staff of the NBPRP, as follows:

Harlon B. Carter—Member of the NRA Board of Directors and Executive Committee, and Chairman of the NRA High Power Rifle Committee.

Ted T. Cosby—Member of the NRA

Board of Directors and NRA High Power Rifle Committee.

R. Adm. Morton C. Mumma, Jr., USN (Ret'd)—Member of the NRA Executive Council and of the NBPRP.

Chester R. Paulson—Member of the NRA High Power Rifle Committee.

E. G. Pope—Member of the NRA Board of Directors and the NRA High Power Rifle Committee.

Irvine C. Porter—Member of the NRA Executive Council and of the NBPRP.

Dexter F. Rhodes—Member of the NRA Board of Directors and Executive Committee, and Vice-Chairman of the NRA High Power Rifle Committee.

Judge Bartlett Rummel—NRA Vice-President and NBPRP member.

John M. Schooley—NRA President and NBPRP member.

James C. Whitney—Member of the NRA Board of Directors and Executive Committee.

These are all outstanding competitors and are authorities in high power rifle marksmanship.

The rifles were selected from the production line at Springfield Armory, and the 7.62 mm. ammunition was taken from Army issue stocks. Both rifles and ammunition were strictly Service type, no National Match production being available. The rifles and ammunition were turned over to the members of the group for them to test in whatever place, time, and manner they chose. The rifles were made avail-

able about Sept. 1, 1961, for use until the end of the year, and the availability was extended to March 1962 when requested by individuals.

The group members were asked for their comments after the tests. It was stressed that any constructive criticism would be welcome and that the evaluators pull no punches in expressing their personal opinions.

The evaluators all responded with thorough and detailed reports of their tests and conclusions. Copies of their reports to the Army authorities were furnished the National Rifle Association. From these copies the most significant features are summarized below.



Harlon B. Carter—The rifle was fired 4 times over the National Match course, for 14 strings of 10 shots each at 200 and 300 yds., and additional informal firing to ascertain whether it would be possible to jam it by speed of semi-automatic operation. First firing was done by myself and nationally known champions Martin J. Hull, Richard K. Ilao, and Elmer Shook. The best shooting was done by Ilao, with 20-shot strings on the A target of 200 yds. offhand, 97; 200 yds. rapid-fire sitting, 99; and 300 yds. rapid-fire prone, 95. This is good shooting with

Specifications

7.62 MM. RIFLE M14

Mechanism Type: Gas operated, semi- and full-automatic, detachable box magazine
Caliber: 7.62 mm. NATO
Weight: 9.0 lbs. with empty magazine
Barrel Length: 22"
Over-All Length: 44½"
Magazine Capacity: 20 rounds
Stock Dimensions: Length of pull 13¼" (with butt hook down), drop at comb 2¼", drop at heel 2½", pitch down 1⅞"
Sights: Guarded post front, guarded aperture rear adjustable for elevation and windage in one-minute clicks
Sight Radius: 26¾"
Rifling: 4-groove, right twist, one turn in 12"
Accessories: Selector (for semi- and full-automatic firing), hinged butt hook, sling, bayonet, bipod, blank firing attachment, breech shield, grenade discharger, maintenance-repair kit (under butt trap)

any weapon and is remarkable with a military-type weapon neither modified nor tuned up. The rifle was entirely dependable and pleasant to shoot.

These shooters used a handload consisting of the 125-gr. Sierra bullet and 45 grs. Western Ball Powder from .30-'06 military ammunition. With this load, they felt the groups were about half the size of those obtained from issue ball ammunition.

Four times through the National Match course gave me 230, 225, 224, and 223. After a disappointing start with issue ball ammunition, the 600-yd. portion of these firings was re-commenced and completed with 173-gr. FA Match bullet and 44 grs. Western Ball Powder taken from .30-'06 military ammunition. For comparison, my average during last year of competition (1957) with M1 rifle, tuned up and glass bedded by a good military armorer, and firing match or handloaded ammunition, was 241.4.

Mr. Ilao reports his average with his excellent Model 70 match rifle in the same caliber is approximately 243. Thus the scores he obtained with the M14 on the first day we tried it are approximately equal to the match rifle, and indeed in his hands the M14 performed as a real match rifle.

We conclude that the M14 should be an excellent military rifle. With some degree of selection and tuning, and with accurate ammunition, it will perform excellently as a match rifle over existing military courses of fire.



Ted T. Cosby—

I had the rifle fired by several shooters, including Master, Expert, Sharpshooter, and one Junior, in addition to myself. Their

comments from both examination and firing were all favorable.

The first impression was that the magazine would interfere with position firing. This proved to be true only in the standing position. Reloading the magazine from 5-round clips seemed harder than with the Springfield or M70. The M1 rifle is easier to load with its 8-shot clip.

In initial firing the center of impact tended to wander. Subsequently 2 shooters each fired the rifle 10 shots as rapidly as possible by fanning the trigger, both to get it bedded and to see its rapid-fire functioning capabilities. Thereafter the rifle put them exactly where you held them; there was no more wandering. Trigger pull was good for all shooters. The rifle shot as well in bad conditions

as in good. It was allowed to get wet while in use and with no particular care performed with complete satisfaction. It was allowed to stand after firing for a period of time, and without any cleaning or adjustments accurate firing was resumed with no trouble.

This rifle has done away with a lot of things that had to be doctored on the M1 for match shooting.



R. Adm. Morton C. Mumma, Jr., USN (Ret'd)—

The rifle handles and feels better than the M1, probably because the center of gravity of the M14

rifle is located farther to the rear.

After more than 20 shots sustained fire, heat waves from the handguard slots made obtaining a sight picture difficult—it is believed venting through side slots only would diffuse the heat waves away from line of sight. (*The handguard is now manufactured without slots.—Ed.*) Because of the depth of the rifle butt on my shoulder in firing positions I cannot use the butt prong. A number of shooters of different build had no trouble with it. I had to fire with right thumb along the stock to prevent face bruising. Only one shooter of small stature and short arms had difficulty with the long magazine.

The rifle functioned without fault. After difficulty in loading the magazines, 2 coils were cut off the spring in one magazine, which resulted in easier loading and no failure to feed in sustained fire. It would appear feasible to furnish pre-loaded disposable magazines.

The rifle loaned me was very disappointing in accuracy and could be termed unsatisfactory for even Service standards. Careful adjustment resulted in only little improvement.

However, 6 Marine Expert Riflemen and I fired 3 M14 rifles of the local USMC Reserve Unit, with my remaining issue ammunition, with very gratifying results in accuracy. Their 3 rifles also functioned perfectly. The only difficulty with them was the same one in loading the magazine.



Chester R. Paulson—

Most of the competition shooters who had the opportunity to examine the rifle sent me liked the feel of the M14. It seems

to balance better than the M1 and is

slightly lighter. I took the rifle apart and was very pleased with the bedding. The trigger mechanism, very similar to the M1, can be adjusted readily by an experienced ordnance man.

The first day I fired the M14 I was pleasantly surprised at the accuracy, very easily shooting a 48 at 600 yds. and calling the other 2 out. It shoots just as well for accuracy as the National Match M1 rifles I have fired.

I do have some criticisms of the M14 as a match rifle. The 20-shot magazine makes the rifle unhandy to fire both from sitting rapid-fire and from standing. I had trouble keeping my eye aligned with the rear sight due to the very low, thin comb. I believe the comb should be made about $\frac{3}{8}$ " higher. The stock also is somewhat too short for me. The rear sight has the same coarse one-minute adjustment as the M1, and I believe it would not have increased the cost much to put on $\frac{1}{2}$ -minute clicks.

I believe the civilian shooter will welcome the M14 rifle as a match weapon superior to the M1 in all phases, except possibly the 1000-yd. where the .30-'06 cartridge will give better wind bucking.

I am returning the M14 rifle very reluctantly, as I have come to like this rifle very much.



E. G. Pope—

The accuracy of the rifle with the ammunition furnished was very poor. From sandbag rest the gun and ammunition would not

shoot in the 12" black at 200 yds. At 600 yds., I used a handload with the 168-gr. Sierra International Match bullet for a score of 94. I also loaded some 125-gr. bullets which cut the groups almost in half.

The rifle is easy to shoot and handles well, better than any military rifle I have ever shot. It settles back into place exceedingly well in sustained fire. I had not a single malfunction during the firing of more than 500 rounds.

On this particular rifle the 200-yd. zero was 18 clicks up from the bottom. I see no reason why the front sight could not be of height to make the 200 yd. zero some 4 or 5 clicks. This would allow the shooter's face to be placed more firmly on the stock.

Some simple method should be developed, if it has not been done already, to keep the receiver tight in the stock. We know what happened to the Springfield with loose guard screws or the M1 floating around in the stock.

I received many favorable comments on the rifle from shooters and the public. I think it is a good weapon and will continue to be improved.



Irvine C. Porter—The rifle was fired standing, sitting, and prone at distances from 100 yds. to 600 yds., in slow-fire as well as sustained fire.

It is thought that at intervals the magazine bounced off the forearm during recoil action while firing in the prone position, resulting in an occasional misplaced shot. No difficulty was encountered with the magazine touching the forearm when shooting from the sitting or offhand positions.

The ability to load 5-shot clips directly into the action without removing the magazine was found to be a distinct advantage, although some stiffness was encountered in the magazine spring as the third and fourth clips were loaded.

The rifle averaged 94.99% in score for all 495 shots fired. There were 6 misses—one during initial sighting-in, and 5 at 600 yds. slow-fire when the action apparently shifted or re-positioned itself in the stock on the 152nd round. There were only eight 3's recorded—one during initial sighting-in, 4 during 90 rounds of sustained fire at 300 yds. under very unfavorable light conditions, and 3 remaining which are not readily explainable.

Performance during 20-shot sustained-fire strings was particularly impressive. The weapon is capable of extremely accurate sustained fire even under rather adverse conditions. For slow-fire, the trigger assembly should be worked down to closer tolerances, and the receiver should be glass-bedded. A narrower front sight of the National Match type, and a recessed rear aperture of slightly smaller diameter would improve target accuracy.

It is my conclusion that the weapon tested is vastly superior, at this stage of its development, to the M1 rifle which I test fired in 1939, and that any U. S. troops armed with the M14 will be capable of delivering very effective fire under practically every condition.

All that remains to be done, in my opinion, is to provide means for every physically fit male in the age bracket of 18-65 years to qualify annually at least as a Marksman with this fine weapon. Such an achievement will materially strengthen the physical as well as the mental and moral fiber of our nation, contributing greatly to its defense.



Dexter F. Rhodes—I was assisted by 3 NRA Expert class riflemen and 3 Master class riflemen, and I hold the classification of Master.

Each person fired 5 rounds for practice and sighting-in at each range, then fired for record at 200 yds. standing, 200 yds. rapid-fire, 300 yds. rapid-fire, and 500 yds. (20 shots) slow-fire. Average for the entire group was 228.7, in comparison with the same group's 1961 total average with National Match grade M1 rifles of 235.3.

Functioning of the rifle was perfect.

The participants liked the vented handguard. They desired a 10-shot magazine for tournament shooting. Personally I do not agree—we may have automatic fire matches, and the 20-round magazine is standard.



Judge Bartlett Rummel—I fired the rifle myself, and permitted other club members to handle and fire it. It never failed to operate in a mechanically perfect manner.

The M14 can be handled more easily and quickly than the M1 rifle.

At 600 yds., where such a change would become readily apparent, at no time did I detect any change in point of impact. The rifle did very well indeed at the shorter ranges during rapid-fire. In my opinion, possibles in the rapid-fire matches will be extremely frequent.

The hinged buttplate worked very well during rapid-fire shooting to keep the butt of the rifle from slipping on the shoulder.

On the rifle furnished me there could have been some improvement in the trigger pull. Also the stock was a little short, and I experienced having my right thumb bump my nose when the thumb was placed around the stock. There was some complaint about the comb of the stock being too low.

My conclusion, and that of those who also handled and shot the rifle, was that it will lend itself very capably to match competition.

I am adding a report written by Mrs. Alice H. Bull, a Director of the National Rifle Association. Mrs. Bull is the first woman ever to receive the Distinguished Rifle award, and is an extremely experienced and qualified rifle shot. I asked her to make these observations.



Alice H. Bull—From the standpoint of training I believe the M14 rifle is superior to the M1 due to its more convenient size, lighter weight,

reloading simpler to learn, and less fatigue in firing.

I like the M14 better as an offhand rifle than the M1, even though I have shot many scores in the high 90's and have a 20-shot possible in the standing position with the M1. The balance and lighter weight of the M14 should produce more high scores than we have with the M1, although the latter has been a popular offhand match rifle.

The leanness of the M14 stock makes people think it is smaller than the M1. This stock makes the M14 fit better and feel better to me. Some shooters believe the M14 stock comb should be higher to bring the eye closer in line with the sight. The slenderness of the comb compared to the broad, heavy stock of the M1 probably causes that feeling.

The 20-shot magazine should be shortened for training and match firing. Holding the rifle at the balance point offhand is interfered with by the long magazine, and it can be very uncomfortable in the sitting and prone positions.

The rifle shot amazingly well with the small bullet. Firing in a 10-mile wind at 600 yds., with poor visibility, I scored a 49-6V, calling the shot which was out. In rapid-fire at 200 yds., in good weather and light conditions, possibles were frequent, with some 6V to 8V groups. The rifle shoots well enough to justify using half-minute clicks for windage and elevation on the rear sight.

This is a fine rifle for the National Match Course, except that a few more seconds might need to be allowed for reloading with 5-shot clips, as the 8-shot M1 rifle clip loads into the M1 rifle faster than the 5-shot clip into the M14.

The steel 5-shot clips in which the cartridges are supplied need small tips added to them to prevent the end cartridge dropping off. Very tight clip springs are not a solution as then the cartridges will not strip out properly. Using different magazines, I noticed considerable difference in the stiffness of the magazine spring, making some easier to load than others.

I am very pleased with the performance of the M14 rifle from my experience. Key item for the match shooter and trainee would be the shorter magazine. The present methods of training and the courses of fire will adapt very nicely to the new rifle.



John M. Schooley

—After sighting-in, I fired a 297 over the DCM qualification course, and this is very good for me since I am not in practice.

Group size at 200 yds. was excellent and would equal groups fired with any bolt-action piece I have ever owned.

I was impressed with the performance during sustained fire. Recoil appears much lighter and in a backward thrust, rather than upward. I think the M14 is much easier to hold on the target than the M1 rifle.

It was difficult to fire while wearing gloves, due to the small trigger guard, and I think the trigger guard should be enlarged for field use.

I would suggest a magazine be manufactured to hold 10 rounds instead of 20 for range use, as a 20-round magazine is rather awkward in some firing positions. I would also suggest a finer click adjustment for the rear sight, as the standard does not allow close adjustment desirable for target work.

I was greatly impressed with the performance of the rifle and did not experience one malfunction in the 500 rounds I fired.

Since its performance in my opinion far exceeds that of the M1 during its early life, I am convinced the M14 will prove a practical, efficient, and accurate piece for ground troops. I am equally certain that when available it will be well received by our civilian shooters.



James C. Whitney

—The rifle was shot by myself and 3 very competent high-power rifle shooters over the National Match Course as many

times as possible, and it was also shot in registered matches so the weapon would be available for inspection and comment by other civilian shooters.

The rifle handled very well and the recoil was very mild.

After firing at 200, 300, and 600 yds., we were much disappointed in the accuracy with issue ball ammunition. It was then decided to close the gas spindle and operate the rifle manually. The results were amazing. The next 10 shots were all in the black with a 4V count.

Several reloads were tried and 2 were settled on. The first was the 125-gr. Sierra bullet with 44 grs. of Ball Powder taken from military .30-'06 am-

munition, for 200-yd. firing. The second was 43 grs. of the same powder with a 173-gr. boattail Match bullet.

The first 10-shot group at 200 yds., fired from bench rest, measured 3". We were very enthusiastic. The rifle was used in several matches with this reloaded ammunition, and the following scores were the best shot:

- 20 shot standing, 200 yds.—98
- 20 shots prone, 600 yds.—98 (11V)
- National Match Course—244.

This rifle was examined by over 100 shooters and was received very enthusiastically. We who fired this weapon are convinced it is the finest production rifle ever produced, with proper ammunition. We all agreed that we had never seen issue ammunition perform so badly. Recommendations are to improve the ammunition, and to make this rifle available to the civilian shooter as soon as possible.

Conclusion

The desire most often expressed was for a 10-round magazine, to eliminate interference with the shooter's forward arm from the long 20-round magazine. This was desired for match shooting only, and in one case for instruction—it is realized the 20-round magazine is required for the rifle's basic military purpose. It was desired the magazines be easier to load.

Some users obtained excellent accuracy from the issue ammunition supplied, others very poor accuracy. In the latter cases, accuracy was obtained with suitable handloads, with exception of one rifle in which handloads were not tried. The reason for this variable experience with issue ammunition accuracy is not known.

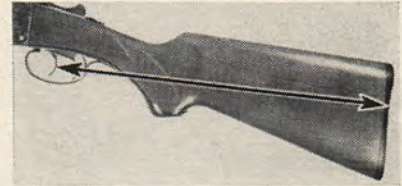
On all other points the reaction was almost unanimously favorable. Especially commented on were ease of handling, excellent accuracy especially in sustained fire, complete reliability (not a single malfunction was reported), and suitability for match shooting with proper ammunition. The rifles tested were straight Service rifles, taken directly from the production line.

A National Match M14 rifle has been developed. It is assembled and adjusted for maximum accuracy, and is equipped with sights of target dimensions adjustable in half-minutes of angle in windage and elevation. A Match cartridge, loaded with 172-gr. boattail bullet like that of the M72 Match cartridge in cal. .30-'06, has been developed for use with the National Match rifle.

Should the National Match rifle and ammunition be made available for sale through the Director of Civilian Marksmanship, NRA members will be informed in THE RIFLEMAN. ■

Illustrated Definitions

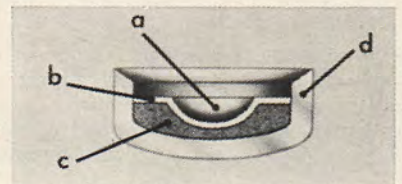
Simple and practical explanations of firearms and shooting terms, given as aids to identification and understanding. The definitions are not, and are not intended to be, technically or legalistically complete.



Length of pull—Distance from center-front of trigger to center-rear of buttplate, recoil pad, or buttstock. With a 2-trigger gun, length of pull is measured from front trigger.



Frizzen (battery)—That component of a flintlock or snaphaunce gun which is struck by the flint to produce sparks for igniting the priming powder. It is made of steel, and is pivoted to the outer forward part of the lockplate. It is integral with the pan cover in flintlock guns, and separate from the cover in snaphaunce guns.



Berdan primer—Primer consisting of a metal primer cup (d), priming composition (c), and composition protective disk of foil or other material (b). The anvil fits in the primer at (a) and is integral with the cartridge case and not part of the primer. This primer was developed in the late 1860's by A. C. Hobbs of Union Metallic Cartridge Co., but was named after Col. H. W. Berdan, U. S. Army, who worked with Hobbs on cartridge developments. Col. Berdan furnished the idea for the anvil. It was first used extensively in the 1870's. It was almost entirely discontinued in this country at the end of the blackpowder era, but is still the most extensively used primer in European cartridges.