

To: J.R. Snedeker
From: C.J.Sweet
Bolt Action Competitive Arms Test

9-18-81
-3-

Customers Selection

Thirty one people were individually asked to rate the rifles for visual appearance only. The results (from best to worse) were:

1. Browning BBR
2. Remington M700 ADL
3. Ruger M77
4. Winchester M 70XTR
5. Smith & Wesson M1500

Preliminary Measurements

Every rifle met Remington's standards except for bore & groove measurements. Browning, Smith & Wesson and Winchester had some 4-groove barrels. We were unable to measure this because we can only measure 6-groove barrels with our gages.

Lock Time

Of the five competitors rifles measured (30-06 Cal.) the Remington M700 has the fastest lock time (3.29 ms.)

Accuracy

At different round levels of the accuracy test, some of the competitive rifles failed to meet Remington specs. They include:

- | | | |
|----------------------------------|---------------------------------|-------------------|
| • Winchester M-70XTR-.243 Var. - | 1.8" avg. at 500 rd. level | Rem.Spec.
1.5" |
| • S&W M-1500 -7mm Mag. - | 2.9" at "0" rd. level | 2.7" |
| • Ruger M-77 -.243 Var. - | 1.6" at "0" rd. level | 1.5" |
| | 7mm Mag. - 3.9" at 500 rd.level | 2.7" |

Field Cycle Test

No malfunctions occurred to the Rugers or the Winchester rifles during field testing. Two Remington M700s and one Browning BBR rifle were removed from test because of breakages or malfunction problems.

Endurance

No serious problems were encountered with any of the rifles during endurance testing. The malfunction rates are low and they consist mostly of:

- Stem low malfunctions
- Shell jumps mag. malfunctions

Engineering Sample & Strength Test

These will be covered in separate reports.

CJS:T