MAJOR FACTORS CONTRIBUTING TO POOR ACCURACY

(Point of Impact and Group Size)

Cause	Probable Effect
1. Bent Barrels	Point of Impact
a. Long Sweeps	
b. Bent under Ramp	
c. Eccentric mass due to ramp	
2. Enlargement of rifling (draw) and/or (cut) under ramp.	Group Size
a. Variation between lands and grooves	
b. Opening up under ramp	
3. Non-Uniform Rifling	Group Size
a. Oversize (over spec's)	
b. Bell mouth	
c. Tapered	
4. Muzzle Burrs	Group Size and Point of Impact
a. Crowning burr	Group Size
b. Angular cut off	Point of Impact
c. Pilot damage	
d. Handling	
5. Bedding	Group Size and Point of Impact
a. Off center	
b. Too much pull	
6. Damaged or pitted rifling (visual inspection)	Group Size
7. Eccentric Barrels	Point of Impact
a. O. D. with I. D.	
b. Ramp off center	
8. Twist (Gaged at Rifling)	Group Size and Point of Impact
9. Alignment of Barrel & Receiver (Not gaged at present)	Point of Impact
10. Stock stability	Point of Impact
a. Change of bedding	
11. Chambers	Point of Impact and Group Size
a. Shallow & deep throat	
b. Eccentric bullet seat	
12. Ammunition	Point of Impact and Group Size
a. Sub-Standard	
b. Palma for rechecking (under consideration)	

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13. Shooter — Point of Impact and Group Size
    a. Variable results in borderline cases

14. Material
    a. Barrel
    b. Bullet

Compiled by E. K. Wheat
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ml