

COMPETITIVE LARGE RIFLE PRIMER ANALYSIS

Factors affecting the sensitivity of the primers in competitive 30.06 ammunition (Remington, Winchester, and Federal) and in competitive large rifle primers for the trade (Remington #9½, Winchester #8½-120, Federal #21, CCI #200 and CCI #250 Magnum) were investigated to determine if significant differences existed.

None of the factors studied provided information that would make either the primer characteristics or individual differences to be the cause of firing problems. 83

Actual analysis, chemical and physical, of Remington's brass primer cup strip stock was within specifications in all aspects (Table I).

Physical measurements (see attached tables) such as cup head thickness (Table II), cup diameter (Table III), cup eccentricity (Table IV), head contour, hardness (Table V), and light blow firing pin indent (Tables VI and VII) did not reveal any significant differences except for the Federal primers.

The Federal primers have a domed head instead of a flat head that all of the others tested have. Also the Federal cups apparently have been either annealed or produced from softer strip stock since these cups are much softer than the others tested (Table V).