

Tests were conducted with a series of primers with reduced pellet weights. WLIB's started to occur at a 10-20% freq. at about .77 gr. when tested at -20°F. At room temperature, the minimum pellet wt. sample of .48 gr. produced no WLIB's; in fact the minimum individual pressure was 14,800 psi. Examination of 100 charge weights from N12Y19A found a minimum individual of .870 gr. and an $\bar{X} - 3\sigma$ projected minimum of .81 gr.

A test was conducted on primers from N12Y19A to see if additional drying would improve the uniformity of the ballistics; it did not. Further testing will be done to verify that current drying times are adequate.

To date some 350 rounds of N12Y19A have been fired at -20°F or tested for pellet weight and nothing approaching a squib load has been encountered.

In testing with reduced pellet weight primers, it was noticed that the 97 battery cup gives more uniform ballistics. The change to this battery cup is being evaluated. The #111 offers better inspection potential and is easier to fabricate.

PAL/cas

4/23/81