

## Suggestion II

Use a bullet design of two diameters.

Fig. 1

*Bullet  
with  
Two  
diameters*

The front section, for example, could be .284" in diameter and the rear section .375" in diameter. The first 20" of 24" of the barrel is smooth bore to accommodate the .375" rear cylinder of the bullet and the last 4" a .284" rifled bore. The juncture of the two sections of bullet are sharp, creating an intentional stressed area. The bore provides a sharp shoulder from .375" to .284" to shear off the rear slug which acts as a plug preventing any further forward movement of gas.

Fig. 2

Fig. 3

The sheared .284" diameter forward section is allowed to enter the 4" of rifled barrel, spin stabilize, and exit from the muzzle. The remaining slug must be removed. If the front section of the barrel is allowed to slide forward due to the force generated by the forward motion of the bullet, an escape vent could be provided to discharge the slug and the pent-up lower velocity residual gas. It is believed that because of inertia in actuating the mechanism sufficient time to release the stored gas could be programmed to discharge at a gradual reduced rate with negligible effect on recoil reduction. Fig. 4