The original case design was then changed in order to obtain increased volumes and the second calculations indicate that these new cartridges will produce the required velocities. These cartridges were the .276, the .224/4000 and the .220/3000.

Pressure travel curves on .410 shot shells were developed by integration of available pressure time curves. This information was for use in checking the bursting of gun barrels.

A number of interior ballistic calculations have been made in connection with the caliber .60 development. Types of powder, charge weights, velocities and pressures were calculated for various bullet weights in both the T1 and T2 cases. The predicted pressures from these charge weights agreed with the measured values.

Two man months have been required to measure barrel times on the carbine, the .30/06 and caliber .60 cartridges. This also includes miscellaneous velocity and pressure testing.

Active Projects For Which No Detailed Report Is Made At This Time	Authorized Amount
Time Interval Generator - TM-3366	$ 1,500
Technique of Design and Calibration of Quartz Piezo Pressure Gauges - TM-3339	1,000
Inactive Projects	
Improved Lubrication of .267 Bullet - TP-3383	$ 2,500
Revolver Ballistics Caliber .38 Special F.M.C.-TM-3354	2,500
Study of Bullet Trajectories - K-3026	9,000

Intelligence Group - J. F. Hutchinson, Group Leader

Collaboration with Patent Attorneys and administration of library functions have been carried on without significant deviation from routine.

ENGINEERING UNIT

J. H. Hodgson, Superintendent
W. H. Barry, Assistant Superintendent

Product Development Group - C. E. Newcomb, Supervisor

Project: All Metal Shot Shell, 12 Gauge - F-328-R2 (TS-6100)
(.410 Gauge report on page 1)