Project: Caliber .30 Frangible Bullet - TP-3443

Personnel: J. Fischer, Jr.

Authorized Amount: \$1,000 Total Expended to Date: \$1,007

Nature of Problem:

The objective of this work was an evaluation of the application of known spatterless compositions (presently and/or previously used commercially for cartridges of other calibers) to a caliber .30 projectile, including ballistic report on such cartridges as may be developed. This projectile is to be used in training aerial gunners and is to be fired under simulated combat conditions against a lightly armored plane. The present bullet made of a bakelite and lead composition is extremely difficult to manufacture and process. An investigation was requested by the Ordnance Department to attempt to devise a suitable bullet which could be manufactured more readily.

Progress from Inception:

Experimental samples of bullets were made from various compositions including the present commercial Spatterless lead. No material or process was found however which produced a bullet much more suitable for the purpose than the present frangible bullet. A full report covering the work done on this project was issued on December 26 and the project has been closed out.

Project: .22 Caliber Jacketed Bullet - TP-3434

Personnel: F. L. Coursey

Authorized Amount: \$10,150 Total Expended to Date: \$4,644

Nature of Problem:

The objective was to develop a jacketed .22 caliber bullet to be loaded in long rifle cases which would give ballistic performance comparable with the present lead bullet. Fifty thousand rounds of these cartridges were to be manufactured and delivered to the Ordnance Department for use in aviators emergency kits.

This Quarter's Work:

The design of this round and the manufacture of 50,000 cartridges was completed but many ballistic problems were encountered and a process for large scale manufacture has not been fully developed.

Proposed Next Quarter's Work:

A supplemental contract for additional development work and manufacture of another 50,000 rounds is pending. It is hoped that within a short period processing and ballistic difficulties can be eliminated and preparations made for plant scale production.