This Quarter's Work:

Several mixtures having good sensitivity stability and corrosion characteristics have been carried to the place where plant scale tests can be made.

Proposed Next Quarter's Work:

Plant scale tests will be made if possible and experimental work will be continued if necessary to provide a satisfactory mixture.

Project: Non-Mercuric, Non-Corrosive Center Fire Priming Mixture - K-3023
Personnel: E. H. Johnson
Authorized Amount: $44,000 Total Expended to Date: $40,500

Nature of Problem:

Originally to provide a satisfactory priming mixture for caliber .30 carbine military production. Later to provide a carbine priming mixture having less tendency towards mass detonation than 1348.

Summary of Progress from Inception:

1348 was found to be satisfactory for use in the carbine. Extensive work led to the development of J-232 having a reduced tendency towards mass detonation. Because of the presence of 10% PETN which must be mixed dry, J-232 is difficult to manufacture.

This Quarter's Work:

A simplified mixture, J-383, appears satisfactory on small tests but more extensive tests are needed. Caliber .38 S&W Special cartridges primed with J-232 and J-257 showed a small decrease in sensitivity after ten months' storage at 120°F.

Proposed Next Quarter's Work:

Specific investigations now under way will be completed and the project closed.

Project: Heater Primer Pellets (OSRD) - TM-3326
Personnel: T. B. Johnson
Authorized Amount: $10,000 Total Expended to Date: $5,800

Nature of Problem:

To provide primers in accordance with requirements set up from time to time by OSRD.

Summary of Progress from Inception:

Satisfactory primers have been produced for each set of conditions. In addition brief investigations have been made of fuses, stab primers and electrical ignition.

This Quarter's Work:

A study of electrical ignition has been completed and a final report has been written.