Nature of Problem:

To investigate various processes not currently applied to gun manufacture.

Summary of Progress from Inception:

Exploratory work was carried out on precision casting, induction heating, choke swaging for shotguns and several other processes.

This Quarter's Work: None.

Proposed Next Quarter's Work: Project dormant.

Project: Low Cost Finishing Methods - TP-3445

Personnel: R. H. Grace

Authorized Amount: \$14,550 Total Expended to Date: \$5,141

Nature of Problem:

To develop lower cost finishing methods.

Summary of Progress from Inception:

This project was authorized on December 21, 1944. expenditure to date includes money spent under Projects B-151 and MCB-2150 which were absorbed by TP-3445. Under TP-3445, several lower cost methods of preparing metal parts for coloring have been observed.

This Quarter's Work:

A visit was made to the Pangborn Corporation to procure sand, grit and shot blasted components for coloring. A visit was made to the Vapor Blast Manufacturing Company to observe their process and to process samples. This is a wet method of blasting which permits the use of abrasives as fine as face powder.

Proposed Next Quarter's Work:

Continue work on sand and vapor blasting. Obtain color samples and perform wear tests to evaluate finish.

Precision Casting Process - TM-3355

Personnel: E. M. Wilson, E. G. Drumm Authorized Amount: \$14,500 Expendi Expenditures to Date

Nature of Problem:

To determine correct process and materials for precision casting of gun components.

Summary of Progress from Inception:

To date all the major equipment for the process has been obtained and installed except an electric arc steel melting furnace which is on order. Some aluminum and some steel parts have