

curacy and function, and supply Bridgeport Technical with a Model 241 with this chamber for test work on functioning of higher velocity ammunition.

Project: Plug Reaming .22 Caliber Barrels - TP-3403-6
Personnel: E. K. Wheat, K. B. Fontaine
Authorized Amount: \$500 Expenditures to Date: \$352 .

Nature of Problem:

(Exploratory) To investigate the possibility of replacing conventional reaming operation by plug reaming on the draw rifle machine for the 500 series barrels.

Summary of Progress from Inception:

The commercial experimental converted cut-rifling to draw rifling machine was installed in Building 84-3.

Experimental plugs were designed and fabricated. An experimental drill and ream tool was designed and used.

Barrels were specially processed with various diameters for experimental data.

This Quarter's Work:

Improved barrel drilling was accomplished with the combination tool and cold rolled steel barrels to facilitate plug reaming.

Plug reaming was attempted on the commercial experimental draw rifling machine with subsequent plug rifling. The machine did not satisfactorily perform due to lack of sufficient barrel support combined with push rod strength. Heat treated rods are on order.

Operations were suspended October 27, 1944, due to lack of space to relocate the experimental machine after removal from the Commercial Assembly Area formerly occupied.

Proposed Next Quarter's Work:

Adequate measuring instruments to control .22 caliber testing have been ordered under a separate project.

The receipt of this equipment will facilitate further experimental work on this project..

Adequate space has been provided in the new Technical Pilot Plant Area.

Project: Processing Methods for Arms Components - TM-3321
Authorized Amount: \$10,000 Total Expended to Date: \$8,170