Ilion Minute No. 5, 1959

#### OPTIMUM BARREL LENGTHS - RIM FIRE RIFLES

The Research & Development Department displayed samples of Models 510, 511, 512, 514, 550, 552 and 572 rifles provided with 21" barrels. Comparison was made between current production samples of each model and the shortened-barrel prototypes. It was reported that a 21" barrel length was chosen for the samples since this length is necessary for tubular magazine models and it did not appear fessible to provide different lengths for tubular and nontubular magazine offerings.

The Plant reported that economics are being prepared. A high spot economic estimate indicates cost of \$10,000 for conversion of the entire Rim Fire line to 21" barrels with about \$8,000 of this cost resulting from conversion of Model 552-572 barrel machines. Savings in materials would average \$.04 to \$.05 per barrel, and represent an annual saving of \$2,000 to \$2,500 based on a rim fire rifle volume in these models of 50,000. Complete economics are expected by October 1.

The following appears to favor shortening barrels to 21

- 1. Improved appearance.
- Improved firearm balance.
- en indel 21" barrels approach optimum length for ballistic efficiency.
- Modest maving in material cost partially offsets change over cost change-over cost.

The Sales Department will consider the question of barrel shortening and the possibility of converting a portion of the Rim Fire line to shorter barrels as a means of testing market reaction before committing the entire line.

#### GENERAL

### MARKET DEVELOPMENT

There were no firearm product suggestions for report at this

## DEFERRED ITEMS

# 20 Gauge Magnum Shotguns

This item remains in deferred status.

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