

The overall effect of this program by 1960 would be to replace our present line of guns by a line comprising three basic guns:

1. The Models 552-572 with both regular steel barrel and lightweight colored aluminum barrel.
2. Models 500, 555, and 556 nylon guns.
3. Model 40-X and Model 522 target rifles.

Since this program is tentative and has not yet been authorized, it was considered by the committee primarily as a guide for actions to be taken on models under consideration, particularly the Models 40-X, 524T, 513T, and 552. The actions of the committee on these guns is recorded below under appropriate model designations.

#### MODEL 40-X

Research and Development have been investigating some of the quality difficulties reported by Sales. Two rifles were dry-cycled 50,000 rounds each. The first showed no increase in trigger pull, but did show an abnormal increase in head space. The bolt head of the second rifle was lapped to eliminate any high spots on the engagement surfaces, and was well lubricated before testing. It then showed only a nominal increase in head space, but the trigger pull increased materially. The reason for the trigger pull increase has not yet been determined. The Plant is adopting the practice of lapping the bolt head engagement surfaces, and lubricating before assembly. It is believed that this will eliminate increases in head space.

Other factors affecting functioning which are under consideration include the following:

Trigger. It has been agreed between Research and Development and Sales that complaints relating to the trigger and trigger location are not sufficiently serious to justify introduction at this time of the more expensive Model 725 type trigger.

Accuracy. Ilion Research and Development and Plant are not sure that dimensional changes recommended by Bridgeport Research and Development will lead to