

SHOTGUNS - contd.MODEL 870, 28-410 GAUGEMODEL 1100, 20-28-410 GAUGE - contd.

within specification as to breech pressure and muzzle velocity, the impulse at the orifice was not sufficient. With the handling of 2½" and 3" shells, the orifice cannot be increased and still have the gun function satisfactorily with the 3" shell. Also temperature has been found to be a factor. At -20°, the 2½" shell does not generally provide the impulse necessary to operate the Model 1100. Tests indicate the temperature problem in ammunition does not affect the function of the recoil operated Model 11-48 as this system operates on total impulses.

To determine the 410 gauge gun operation, field representatives were asked to use off-the-shelf ammunition in testing model guns. Marketing was requested to obtain results of field testing as soon as possible. R & D needs the field information for evaluation.

A 2½" chamber for skeet guns has been considered. Since the shot pattern improvement was not significant, this had been dropped. The 2½" chambering of skeet guns would permit the use of a larger orifice hole and improve reliability. The field gun would be chambered for either 2½" or 3" shells, and with the present smaller diameter orifice. The opinion was expressed that 3" shells are generally used in field guns so that no problems should arise.

The possibility of an internally adjustable orifice device similar to that used in Model 1100, 12 gauge export guns was discussed. Although the customer would be instructed regarding the adjustment, it is questionable if this approach would be satisfactory.

With the above considerations, a 2½" chamber Model 1100, 410 gauge skeet gun would be acceptable to Marketing. While there is no power problem in the Model 870 slide action shotgun, it might be advisable to also use the 2½" chamber for the Model 870 skeet guns.