PER CENT OF TOTAL GUNS RETURNED

Year	M/740	M/11-48	S-58	M/572	M/760	M/550	M/870	M/552
1955	18.8%	34.8%	-	3.7%	11.4%	12.9%	8.2%	-
1956	30.9	23.5	6.8%	6.9	8.4	10.1	6.1	-
1957	27.3	16.9	16.9	9.8	5.6	8.4	4.6	4.8%

This tabulation still shows the M/740 one of the leaders
in guns returned each year, with the M/11-48 and S-58
following close to it.

Even more correctly, one should analyze guns returned
as percentage of total cumulative shipments. This
would show the trend of reliability. For example,
see Chart #31 on the M/11-48. Gun returns percentage
rose sharply in 1950 and 1951, then leveled off for
the next three years, indicating a leveling of quality
at 3.8%. But in 1954, when the .410 gauge was intro-
duced, this percentage rate started to rise again and
appears to be leveling off at about 4.5%. If this curve
showed a downward trend, it would indicate improvements
were being made in reliability. But this, too, is not
completely accurate because since the figures are on an
accumulative basis, variations in quality in a high
production year, even several years back, would distort
the yearly picture.

The best way to get a picture of trends of reliability
is to analyze each production year's cumulative returns
to date as a percentage of that year's total production.
For example, see Charts #32 and 33. Each succeeding
year, with the exception of 1954 and 1956, has shown
an improvement in guns returned for repairs and a
lower ultimate leveling out point for total percentage
of guns likely to be returned. This type of analysis
is kept by the Ilion Quality Control Group continuously.
A review of these data for the M/11-48 shows in tabular
form, following, what has been accomplished by the plant
in improvement in quality and customer reliability since
it was introduced, with an estimate of the percentage
of guns for each year that may ultimately be returned.