C. K. Davis D. F. Carpenter () Mary W. U. Reisinger B. E. Stm<sup>2</sup>

CC: C. K. Davis D. F. Carpenter W. U. Reisinger B. E. Strader F. J. Craig G. O. Clifford M. R. Warden G. E. Pinokney A. L. French W. L. Clay

H. K. Fauikner W. H. Davis H. A. Brown R. H. Grace H. J. Hackman (5) D. S. Foote D. E. Miller S. W. Rose R. A. Williamson A. J. Brown

## SUBJECT: CUSTOMERS' COLIPLAINTS ON FIREARMS

It is reasonable to expect an increase in complaints on firearms during the months immediately following the hunting season. Furthermore, our records indicate there has been a sharp upward trend in the use of firearms since World War II. Therefore, it is not surprising that the latest: complaint report for the month of January shows and the report for February will probably indicate, complaints at a monthly rate somewhat greater than we experienced throughout the major portion of the year. It is my belief that we have just seen the completion of the most active shooting and hunting season since the War.

It is also my opinion that there are other contributing factors to the increase in complaints at this time and it is interesting to note from the analysis made that the record breaking production of the years 1946 and 1947 has increased the arms in the hands of customers by large percentages as shown in column 2 below;-

TYPE OF ARM	PERCENTAGE INCREASE OF ARMS IN BANDS OF CUSTOMERS SINCE DECEMBER 31, 1945 (2)	COMPLAINTS PER 100 GUNS OF 1946 & 1947 BASED ON JAN 1948 FIGURES (3)	MAJOR DEMERITS PER 100 GUNS FROM AUDIT RESULTS OF 1947 (4)
and Browning	2 3%	<b>.</b> 041	?
M/31	54	.032	6
M/37	74	16	2
M/81	61 <u>.</u>	40	14
M/121	45	.09	7
M/141	<b>44</b> 、	38	20
M/241	25	24	4
M/510	62	009	)
M/511	<b>99</b> ~	· 02	5
M/512	135	034	) 2
M/513	17	•09	)
M/521 <b>-T</b>	19,601 added during '4	7 •036	•5
M/550-1	5,800 added during '4	7 .95	5

-1-

The overall increase in guns shipped for sale to customers was 46.5%. This latter figure was obtained by adding the shipments of the years 1946 and 1947 as compared to the arms already in hands of customers on December 31, 1945. As a consequence, when we examine the complaint report prepared for January 1948, we find that the total complaints registered were 386 but we also note that approximately 335 total complaints were registered in January 1940 or a difference of only 51 even though there has been an increase of 46.5% in the number of guns shipped. In addition, we have computed the rate of complaints per 100 guns on those shipped in 1946 and 1947 as indicated by the total complaints on these guns received in January 1948 with the results shown in column 3 of the above tabulation. These figures compare quite favorably with the overall figures indicated in my "Analytical Report on Rifle and Shotgun Complaints" dated January 16, 1948. While it is possible that February may also show a monthly rate higher than the avorage, yet by the end of the year it is anticipated that the complaints per 100 guns will average out somewhat nearer the figures shown in the above mentioned report. Therefore, there is no occasion for alarm at this time because complaints have increased in January and will probably also show a fairly high rate for February.

On the other hand, if the rate of complaints should persist at higher levels for a number of months, we should immediately reappraise the situation taking into account the large percentage increases of guns in the hands of customers. Furthermore, in order that we may not be lulled into a feeling that complaints can be lightly regarded because of the hunting season and the increase in production, we must look to our records as shown on the Condensed Monthly Quality Reports for the year 1947 as shown in column 4 above. In most instances a major demerit is a potential complaint. Therefore, if our complaint pattern prevailed at the rate of major demerits obtained in weekly audits we could have a total of 1800 complaints per year on the Model 81 alone or an average of 150 per month. Similar calculations on other models will show even higher potential complaints due to the quantities of guns shipped.

The only arm which gave unexpected results was the Model 550-1. A thorough investigation should be made to determine the causes of failures to extract, feed or eject.

In concluding, therefore, we cannot emphasize too strongly the necessity of eliminating major demerits from our outgoing product by correcting wherever possible faults disclosed by tests, inspections and final audits.

2 -

W. L. Clay

Manager of Quality

"LC:VPD Anci. 2/23/48