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> Ilion, New York January 25, 1963

GAIL EVAIS DIRECTOR OF SALES

SUBJECT:

XP-100 PISTOL AND M-600 RIFLE INFORMATION FOR PRICING DECISIONS

The attached information has been assembled to assist in pricing the XP-100 pistol and Model 600 rifle. It is based on January, 1963 estimates of project expenditures and product costs prepared by Research and the Plant, and reflects the cost increases for pistol packaging, the 30-30 caliber rifle and other minor increases since the original project was prepared a year ago. It is assembled so you can judge on the two bases normally used for these decisions: these decisions:

- Percent return on Total Capital Required and Total Sales Required to Recover Project Expenditures, based on out-of-pocket costs - Table 1 and Figures 1 through 4.
- Operative Earnings and Operative Earnings as percent of Net Selling based on full book costs - Table 2.

The economics for the rifle and pistol are inter-related. We have tried to define the limiting condition of this inter-relationship by developing information for pricing based on:

- Selling price for the pistol and the rifle, presuming both are marketed, with the rifle in calibers 303, 222, and 30-30.
- Selling price for the rifle presuming 30-30 caliber is not marketed.
- Selling price for the pistol presuming rifle is not marketed at all.

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Supplementary details are covered in the attached discussion.

If it is decided not to market the rifle in caliber 30-30, an early decision can save about \$95,000 Operations and Research costs. Only about \$15,000 will have been committed out of the estimated \$110,000 total cost to bring in this caliber, if the decision can be reached within the next month or so.

We will try to answer any questions you may have concerning the attached information. I will include a discussion of this for your consideration on the suggested agenda of the February Operations Committee meeting.

> D. E. Miller Works Manager

Per L. D. Cox

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#### DISCUSSION

### XP-100 PISTOL AND MODEL 600 RIFLE INFORMATION FOR PRICING DECISIONS

### Revised Estimate of Project AD-XP-700 Economics - Table 1.

Table 1 shows the effect on the project economics of the higher costs for the .30-30 caliber rifle, for the new pistol case, and for other minor manufacturing cost increases since the original project estimate a year ago. The estimated cost of the pistol case, and its outer wrap and casing materials is approximately \$3.10 compared to 0.34 used in the project estimate.

The estimated Project Expenditure has increased from \$672,000 to \$738,000, primarily for more Operation and Research charges to bring in the caliber 30-30 rifle. The increased Project Expenditure can be handled without an additional part since it will be within the permissible 10% overrun.

The allocation of permanent investment for the pistol is \$6,000 higher and for the rifle \$13,000 lower that a year ago. The same basis has been used to allocate the investment. Any equipment used exclusively by the rifle or pistol is allocated 100% to the user. Any equipment used by both is allocated 50% to each since the equipment would be required to produce each, independent of its volume. Though less total equipment is being purchased, more of it is being used for the pistol than was estimated a year ago.

Only about \$15,000 of the estimated \$110,000 has been spent toward the 30-30 caliber. If it is decided not to bring out this caliber, an early decision will save in the range of \$95,000.

#### Effect of Selling Price on Profit Margin for Rifle and Pistol - Table 2.

This information is based on full book cost and is equivalent to that in the monthly Operative Earnings statement on which individual model performance is judged. The Unit Operative Earnings are essentially independent of changes in the rifle or pistol volume. The burden factors applied to the model costs are dependent on total plant volume (359,000 units) and the effect of a change in pistol or rifle volume is negligible.

Effect of Selling Price and Volume on Payout and Percent Return on Total Capital Required - Figures 1 through 4.

Figures 1 and 2 - For the Pistol and Rifle, Respectively, Based on Marketing Both, With Rifle in Calibers 308, 222, and 30-30 Per Project.

These two figures are essentially straight forward. The volume of sales to recover their Operations and Research charges have been indicated as a measure of the time before the project begins earning a return.

Pricing the Model 600 faces the problem of cutting into Model 700 ADL sales with the latter's higher profit margin. The operative earnings of the Model 700 ADL based on out-of-pocket costs are about \$27.40. The operative earnings of the Model 600 rifle on an out-of-pocket cost basis are:

Retail Selling Price	Operative Earnings (Based On Out-of-Pocket Costs)
· \$ 85	\$ 16.
\$ <b>9</b> 5	\$ 21.
\$105	\$ 26.
\$11.5	\$ 31·

- For The Rifle, Based on Marketing the Pistol and Rifle, With Rifle in Calibers 308 and 222 only.

This information indicates the effect of abandoning the caliber 30-30. The project expenditures are the same as in Figure 2 except the Operation and Research charges for the rifle assume only \$15,000 expended for the caliber 30-30 before abandoning it.

As an illustration, the project is based on selling 9,000 a year caliber 308 and 222 and 6,000 a year caliber 30-30. If the Model 600 is priced at \$95.00 retail, the percent return on total capital required from Figure 2 would be 27%. If it is assumed the caliber 30-30 is not marketed and only 9,000 caliber 308 and 222 would be sold, Figure 3 indicates the percent return on total capital required would be 25%.

- For The Pistol, Based on Marketing the Pistol Only. Figure 4

In view of the pricing problem on the Model 600, this information shows the effect of not marketing the Model 600. The Permanent

Investment includes all the new equipment used for the pistol if the rifle is not marketed. Any equipment purchased for the rifle which could be profitably used for other models has not been charged against the pistol. The Operations and Research charges to be recovered include those for the pistol and those already spent for the caliber 308, 222 and 30-30 rifle.

The tabulation below is based on Figure 4 and shows the volume and selling price relationship for the pistol to earn 20% return on the total capital required if the rifle is not marketed.

XP-100 PISTOL VOLUME	RETAIL SELLING PRICE FOR 20% RETURN ON TOTAL CAPITAL REQUIRED
3,000	\$130.00
5,000	\$107.50
10,000	\$ 91.50

## PROJECT AD-XP-700-2 XP-100 PISTOL AND M-600 RIFLE COMPARISON OF ORIGINAL & CURRENT THIRD YEAR ECONOMICS BASED ON PROJECT SELLING PRICES OUT OF POCKET COST BASIS

BARBER - PRESALE R 0102033

	Original Project			Present Estimate At Project Selling Prices		
	XP-100 Pistol	M-600 Rifle 308 30-30 222	Total	XP-100 Pistol	M-600 Rifle 308 30-30 222	Total
Quantity	3,000	15,000	18,000	3,000	9,000 6,000	18,000
Rotail Selling Price	\$75.00	\$85.00	•	\$75.00	\$85.00 \$85.00	,
Net Selling Price	\$40.37	S45.74		\$40.37	\$45.74 \$45.74	
Net Sales .	\$ 121M	\$ 686M	\$ 807M	\$ 121M	\$ 412M \$ 274M	\$ .80714
Cost Of Goods	<u> 7111</u>	4084	1:31M	<u>\OOM</u>	<u> 263M 183M</u>	\$ <u>53614</u>
Operative Earnings	\$ 4311	\$ .278M	\$ 326M	\$ 3111	<b>\$</b> 149M <b>\$</b> 91M	\$ 271M
Net Earnings	\$ 2211**	\$ 125M**	\$ 1471/4*	\$ 13M	s 68m s 41m	\$ 1224
Investment Permanent (Allocated) Working Capital	\$ 79M 82M	\$ 101M 399M	\$ 180M 481M	\$ 854 834	\$ 88M \$ - 249M 170M	\$ 173M 502M
Total Capital Required	\$ <b>1</b> 6114	\$ .50041	\$ 661M	\$ 163M	\$ 337M \$ 170M	<b>\$ 67</b> 5M.
Percent Return On Total Capital Required	14%	25%	22%	8%	20% 24%	18%
Operations & Research Costs 305 & 222 30-30	\$ 2154	\$ 228M 49M	\$ 215% \$ 228M 49%	\$ 222N	\$ 233M	222M 233M 110M
Total Project Cost (Parmanent Investment (Ind Operations and (Index operations)	\$ 2944	\$ 376H	\$ 672M	\$ 3071	\$ 321M \$ 110M	\$ 738%

<sup>.</sup> Irreduction cost assumed same as .308 and .222 . Ajusted for 6% All Other Expense Rate Instead of 8% In Effect When Original Project Was Prepared

# EFFECT OF SELLING PRICE ON PROFIT MARGIN OF <u>XP-100 PISTOL AND MODEL 600 RIFLE</u> FULL BOOK COST BASIS UNIT COST DATA PER M&S ESTIMATES OF JANUARY 16, 1963

BARBER - PRESALE R 0102034

	•	XP-100	PISTOL	
Retail Selling Price	\$75.00 *	\$85.00	\$95.00	103.00 \$105.00
Net Selling Price	40.37	45.74	51.13	53.82 56.51
Cost of Goods Full Factory Selling & Adm. Research	39.00 3.84 1.21	39.00 4.35 _1.37	39.00 4.86 _1.53	39.00 39.00 5.11 5.37 1.62 1.70
Total	\$44.05	\$44.72	\$45.39	45.73 \$ 46.07
Unit Operative Earnings	(3.68)	1.02	5.74	8.09 10.44
% Of Net Selling ·	( 9%)	2% ·	/ 11%	15% 18%
		MODEL	600 RIFLE	
Retail Selling Price	\$85.00 *	\$95.00	\$105.00	\$115.00
Net Selling Price	45.74	51.13	56.51	61.90
Caliber	308 <b>30-3</b> 0 222	308 30-30 222	308 <b>30-30</b> 222	308 3030 222
Cost of Goods Full Factory Selling & Adm. Research	\$39.70 \$42.40 4.35 4.35 1.37 1.37	4.86 4.86	\$39.70 \$42.40 5.37 5.37 1.70 1.70	\$39.70 \$42.40 5.88 5.86 1.86 1.86
Total	\$45.42 \$48.12	\$46.09 \$48.79	\$46.77 \$49.47	\$47.44 \$50.14
Unit Operative Earnings	.32 ( 2.38	5.04 2.34	9.74 7.04	14.46 11.76
% Of Net Selling	- ( 5%	) 10% 5%	17% 12%	23% 19%

<sup>\*</sup> Retail selling price used in Project.

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	and 222 to Recover Project Expenditures for Rifle If Caliber 30-30 Not Marketed
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DRAFT

XP 700 Pistol and XC 13 Rifle

It has been assumed that the Fistol with mylon stock and Rifle with a wood Stock are to be added to the oun line. Research has released approximately 80% of the drawings to the plant for processing. Complete release is scheduled by Feb. 1.

Three projects will be issued. The Research project is to cover the pistol and rifle development. A plant project for the KC 13 Rifle and Spts. 68 wood machines and a separate request for standard equipment for \$\infty\$ the pistol and rifle.

The preliminary schedule indicates that the pistol should be ready for a January 1963 announcement. Due to the delivery of equipment for the rifle wood Stock introduction will be delayed until the middle of 1963. Possibly announcement should be delayed until January 1964.

The plant needs the model numbers that will be assigned to the Pistol and Rifle so that process, tooling and other records can be correctly set and