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File

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M/700 Bolt Latch Mechanism

Evaluation of the proposed Bolt Latch mechanism for M/700 rifles indicates it will result in a \$3.00 increase in unit factory cost (full allocation basis) in its first year (1982). For comparison purposes, a 1982 M/700 "Line Before" and three alternative "Line After" results were developed based on M/700 cost performance during the first six months of 1979. These alternatives were:

1. Adding of the Bolt Latch mechanism without adjusting prices.
2. Adding the Bolt Latch mechanism and adjusting prices to maintain the percent pretax margin.
3. Adding the Bolt Latch mechanism without adjusting prices, but deleting the sling and swivels from the BDL grade to compensate for the increased cost.

The results of these evaluations are summarized in the attached table which shows weighted average unit prices, costs, and pretax earnings and the project results. This data has been adjusted to anticipated 1982 price and cost levels.

As shown in this table, Alternative III is the most attractive in % margin, earnings, and net return on investment because it results in a net reduction in costs and working capital requirements. One disadvantage of this alternative is that ANL and Classic grade earnings are adversely affected, and the results shown depend on maintaining current product mix.

Alternative II also results in increased earnings, however, its net return on investment is substantially lower because of additional working capital requirements resulting from increased costs and sales.

All alternatives require project expenditures of \$249M construction and \$83M in operations charges. Detailed data for the line before and each alternative are attached.

J. C. Hutton
J. C. Hutton, Superintendent
INDUSTRIAL ENGINEERING SECTION

by T. R. Andrews
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Att.

1982 Line After

	1982 Line Before	Alternative I Without Price Adjustment	Alternative II With Price Adjustment	Alternative III With Sling Deleted From BDL
Retail Selling Price	\$ 411.28	\$ 411.28	\$ 419.09	\$ 411.28
Net Selling Price	220.55	220.55	224.74	220.55
Factory Cost	158.05	161.05	161.05	155.89
Total Cost	183.75	186.62	187.23	181.68
Pretax Earnings - Unit Line	36.80 \$ 5,123 M	33.93 \$ 4,723 M	37.51 \$ 5,221 M	38.87 \$ 5,410 M
% of Net Selling	16.7%	15.4%	16.7%	17.6%

Project Results

Pretax Earnings

Full Allocation	--	(\$400M)	\$ 98M	\$ 287 M
Incremental	--	(\$310M)	\$223M	\$ 275 M

Net Earnings

Full Allocation	--	(\$204M)	\$ 52M	\$ 150 M
Incremental	--	(\$158M)	\$117M	\$ 144 M

Net Return on Investment

Full Allocation	--	Negative	8.6%	202.7%
Incremental	--	Negative	19.7%	187.0%