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Estimate File #2243

January 16, 1963

L. D. COX

cost
ET
MODEL XP-100 AND MODEL 600 - PROJECT NO. AD-XP-700
REVISED ESTIMATED PROJECT COSTS AND ECONOMICS

Attached is a sheet showing complete revisions of estimated factory costs and project economics for the two subject guns.

Costs are based on current design and processing and incorporate all known changes that have occurred since issuance of the Project (Part II), dated January 23, 1962.

For comparison purposes, original project costs and economics are listed with the revised figures.

R. L. Hall, Supervisor
Methods & Standards Section

R. F. Kerr
R. F. Kerr

Att.
RFKerr:sm

REVISED ESTIMATED FACTORY COSTS AND ECONOMIC BURDEN AND OVERHEAD RATES BASED ON 1965-3RD YEAR COSTS - PLANT VOLUME 379,165

	PROJECT		REVISED	
	F-73-67	F-73-67	F-73-67	F-73-67
VOLUME		3000		3000
RETAIL PRICE		75.00		75.00
NET SELLING		40.37		40.37
STD. MATERIAL		5.55		8.43
VAR.	1.5	0.8	1.5	1.3
VENDOR TOOL	1.0	0.6	1.0	0.8
STD. LABOR		4.71		5.37
VAR.	40.0	1.86	40.0	7.13
WAGE ADJ.				19
DIRECT EXPENSE	110.0	5.18	110.0	5.91
IND. RELATIONS	35.0	7.30	36.0	7.77
GAS-POWER	6.0	7.8	6.6	35
DEPRECIATION	71.5	1.01	75.1	1.74
SPACE	7.0	3.3	7.5	40
DIRECT SUPERV.	13.7	6.2	14.4	77
ENGINEERING	8.5	40	8.8	47
WARRENTY REPRS.		6.0		6.6
OTHER DIRECT	7.0	0.9	7.0	7.1
MEG. OVERHEAD	51.7	1.47	53.9	1.87
WAREHOUSE	8.0	3.8	8.6	46
SUB-TOTAL		31.97		31.79
PLANT OVERHEAD	77.1	5.51	77.0	7.51
FRANCHISE TAX		0.3		
INVENTORY ADJ.	1.0	3.0	1.5	1.9
FACTORY COST		30.76		38.99
SELLING AND ADMIN	4.5	3.84	4.6	3.84
RESEARCH	7.5	1.01	7.0	1.71
TOTAL COST		35.61		44.04
OPER. EARNINGS		4.76		(3.67)
% OF NET SELL		11.8%		(9.1%)
LESS: 1% + 3.4% (PROJECT)				
LESS: 2% + 5.2% (REVISED)				
NET EARNINGS				
PROJECT INVESTMENT				
WORKING CAPITAL				
TOTAL CAPITAL INVESTMENT				
RETURN ON INVESTMENT (POS. A AND B)				
RETURN ON INVESTMENT (POS. C)				

MODEL 600 AND MODEL 600
PART III REV'D)

PROJECT NO. 481700

MODEL 600 RIFLE		REVISED - 1-15-63		TOTALS	
		308-XXVICAL	30-30CAL	PROJECT REVISED 1-15-63	1-15-63
		9000	6000	18000	18000
		85.00	185.00		
		45.74	45.74	807710	807710
7.86		7.77	7.90	134550	137670
17	1.5	11	17	7040	7100
08	1.0	07	08	1380	1350
5.05		5.71	6.06	90330	103860
03	40.0	7.78	7.47	36080	41430
	7.5	70	71		3630
14	115.0	6.57	6.97	103710	118650
77	36.0	7.95	3.13	44170	53690
50	66	38	40	14340	6870
24	72.1	1.37	1.40	19380	24000
73	7.5	43	45	6730	7770
27	131.4	87	87	11910	74970
13	87	50	53	7620	9090
75		77	73	13050	13890
20	70	11	17	1170	7040
58	339	7.94	7.05	28780	25770
51	76	49	57	7790	8970
19		31.87	34.06	577610	585060
25	730	7.65	8.17	773780	140400
02				670	
36	5	70	71	6770	3630
04		37.77	47.44	637750	779090
35	95	4.35	4.35	76770	76770
14	3.0	1.37	1.37	70130	74180
53		45.44	48.16	779750	830040
71		30	(7.47)	77460	(77830)
9.7%		7.1%	(5.3%)	9.6%	(7.8%)

OPERS-REV

(667,300 + 481,400 = 1,154,700)

INTRODUCTION Continued

In searching for means of logically developing new business, our arms designers have been considering potentials of the handgun market for several years. In this connection it was concluded that chances for success would be considerably greater by introducing a design which might be rather unique and offer advantages not available in competitive models.

In order to reduce investment requirements it was decided that the handgun must be designed for interchangeability of parts and operations with other models. In order to minimize legal restrictions a single shot target and varmint type pistol has been proposed, and a favorable ruling obtained by the Patent Attorney from the U.S. Treasury Department.

The design corresponds generally to the so-called "free" pistols used in International Match competitions. In addition to its use as a target arm, the proposed new pistol would be of great utility to the trapper and to those handling cattle and sheep on open range. Full development of the potentialities of this arm will open up an entirely new field of varmint hunting for woodchuck, fox, coyote and similar animals to the pistol shooter. The effectiveness of the design model was demonstrated in field tests conducted during the past year.

The action is of the turning bolt type similar to some of the German target pistols and is provided with a form fitting free pistol type of stock suitable for use for either right or left hand shooters. In addition there is a flare on the bottom of the grip which results in added stabilization during firing. The stock

(Subdivision 3)
Page 2

INTRODUCTION Continued

is designed for nylon molding and can be integrated into the Ilion operations. The relationship between the stock and the action is such to provide ~~the~~ a center of gravity very close to the center line of the barrel, which significantly reduces the muzzle jump and recoil effect so prominent in conventional designs.

The action is a short receiver version of the basic Model 700 and thus adaptable to many of the existing operations and equipment. At the same time it offers a distinct sales advantage in that it is the strongest action ever used in a bolt action rifle and the first commercial type of bolt action to be used in a handgun.

The best results for ^{accuracy and} high velocity ^{with trajectory} ~~low projectile~~ have been achieved through use of a Caliber 222 Remington cartridge which has been modified for use with the short pistol barrel. However, consideration is also being given to an alternate design of the bolt and extractor to accommodate the Remington "Jet" cartridge.

To complete the combination, the proposed new design offers a companion bantam weight high power bolt action carbine rifle. The appearance and handling ^{qualities are good} is ~~very desirable and attractive~~ and ^{is simple gas} ~~has been~~ ^{received} most favorably accepted in preliminary showings to our regional sales managers. It has an ^{overall} length of 37" and weighs approximately 5 1/4 lbs

The rifle stock may be either molded or of the conventional wood, in which case it is proposed to utilize the newly developed custom checkering. This, together with the smaller sized wood blank, will result in material savings. Other material savings and improvements in processing for the barrel, receiver and bolt have resulted in reductions in manufacturing cost and thus providing greater marketing potential.

(Subdivision 3)
Page 3

INTRODUCTION Continued

In addition to the smaller varmint calibers, the carbine rifle will also be capable of handling cartridges up to and including Caliber 308, thus providing distinct advantage in power as compared to other saddle guns.

The Sales Department has recommended that serious consideration be given to include ^{it} the Caliber 30-30 which has always been a relatively high volume seller for a saddle gun. This being a rim type cartridge ^{it} will present design problems requiring development of a new extractor, and also some means will have to be provided to accomplish feeding of this type of round from a box magazine. It is therefore planned to do further work in effort to accommodate the 30-30 cartridge but at the same time not delay introduction of the rifle which can already handle the rimless type ^{ammunition} ~~cartridges~~.

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Does dev cost include
get, 30-30 and other trimmed clips?

(Subdivision 3)
Page 4

INTRODUCTION (Continued)

Based on forecast third year sales, as shown below, the proposed selling prices and estimated operative earnings are:

	<u>Proposed</u>
<u>700 Pistol</u>	<u>X C-13 C.F. Rifle</u>

- Sales Quantity
- Retail Selling Price
- Net Selling Price
- Operative Earnings
- % of Net Selling Price

DESCRIPTION OF PROPOSED WORK

It is proposed to complete the development of the models and procurement of tooling and equipment necessary for production volume Model of pistols and Model of Center Fire Rifles and and respectively for the third year.

PATENT STATUS

(Write J.H. Lewis, Jr., Bpt. - wrote 1/4/62)

REMARKS

Subdivision 5 indicates an estimated increase in net earnings of \$ _____ in the third year of operation, resulting from this project, equivalent to a net return of _____ % on investment.

JARoberts:B
1/4/62

(Subdivision 3)
Page 2

It is proposed to complete the development of the models and procurement of tooling & equipment necessary for production volume Model XP 700 of 8 pistols in 22 Remington short magnum with nylon stock, Model XC-13 of center fire rifles in 22 Remington, 300 caliber with wood stock respectively for the third year.

Remarks

②
If the Sales Department anticipates need for others calibers in these models, work will be continued under a separate project.

D R A F T

REMINGTON ARMS COMPANY, INC.

GENERAL INFORMATION

PROJECT NO. _____ - Ilion WORKSINTRODUCTION

When the double Derringer was discontinued in the year 1935 Remington ceased production of handguns. Although this model was subsequently copied in West Germany and imported into this country, the handgun business was rather dormant for many years. However, within the last decade there has been a significant increase in sales, with some published estimates indicating volumes in the range of one half million units per year. One of the leaders has been Sturm Ruger, and within the past year they have also moved into direct competition with Remington in the autoloading rifle field.

It is believed that a great deal of their success with handguns has been due to offering them in both the modern and traditional styles, and including larger and more powerful calibers at moderate prices.

Smith and Wesson has continued to expand with their high quality and prestige line, and again gaining particular attention in the larger calibers; most recently with a model chambered for the newly developed high velocity ^{Remington} "Jet" cartridge. Colt has not only revived their handgun business but also expanded into the rifle field. High Standard has continued ~~to~~ prominent in the lower priced and smaller caliber field, and at the same time has expanded their marketing into rifles and shotguns.

(Subdivision 3)
Page 1

Patent Statement for XP-13 - XP-700 project from Mr. Phipps 1/8/62:

Consideration of the designs for both the rifle and pistol indicates that no patent infringement will be involved.

A design patent application will be filed to cover the appearance of the pistol when all features of the molded stocks, ribbed barrel, etc., are ~~stabilized~~ stabilized. In view of a search conducted on the fire control mechanism of the pistol as shown in a detailed drawing and photograph submitted to the patent attorney, it is believed that this control has some novelty and will support a patent application.