

REMINGTON ARMS COMPANY, INC.

GENERAL INFORMATION

PROJECT NO. \_\_\_\_\_ - \_\_\_\_\_ Ilion \_\_\_\_\_ WORKS

INTRODUCTION

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 prominent in the lower priced and smaller caliber field, and at the same time has expanded their marketing into rifles and shotguns.

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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

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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 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 low trajectory have been achieved through use of a Caliber 222 Rem. 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 and sample guns have been favorably received in preliminary showings to our regional sales managers. It has an approximate 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

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and improvements in processing for the barrel, receiver and bolt have resulted in reductions in manufacturing cost and this providing greater marketing potential.

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 including 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.

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>XC-13 C.F. Rifle</u>
Sales Quantity		
Retail Selling Price		
Net Selling Price		
Operative Earnings		
% of Net Selling Price		

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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 XP-700 of \_\_\_\_\_ pistols in 222 Remington short magnum with nylon stock, Model XC-13 of \_\_\_\_\_ center fire rifles in 222 Remington, 308 Calibers with wood stock, respectively, for the third year.

PATENT STATUS

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. 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.

REMARKS

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

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.

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	<u>Project / Wage Increase M/700 (A Grade)</u>	<u>Inventory / Wage Increase M/721</u>	<u>Estimate for Project</u>	
			<u>XC-13</u>	<u>XP-700</u>
Standard Material	\$ 8.62	\$ 8.61	\$ 7.86	\$ 5.55
Standard Labor	6.44	5.72	5.25	4.87
Total	\$ 15.06	\$ 14.33	\$ 13.11	\$ 10.42

## Retail Selling Price

Project Estimate	\$ 99.95			
Forecast #1	101.25	101.25		
Est. @ 30% Factory Profit	\$114.40	\$108.25	\$100.40	\$ 87.20
Retail Selling Price	\$101.25	\$101.25	\$ 85.00	\$ 75.00
Est. Factory Profit %	20.8	25.2	17.3	18.6

XP-700 Pistol and XC-13 C.F. Rifle  
Estimated Expenditures

Development (R&D)	\$ 72,300
Tooling	351,500
Tools, Design, Revisions	197,200
Molds	96,900
Vendors	52,400
Machine	5,000
Machinery (Capt.)	50,000
Production Aids	20,000
Pilot Operations	16,500
Other	35,800
Total	\$ 546,100

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