

OPERATIONS COMMITTEE MEETING
NOVEMBER 3, 1950

MINUTE #15, 1950
ARMS

J.S.HOFFMAN Absent - W.E.Gregg acted

Pages 1 & 2

ARMS DEVELOPMENT SCHEDULE

The proposed Arms Development Schedule dated October 30, 1950, was examined by the Committee. Under Shotguns, the reasons for changes in notations under "Warehouse" and "Announcement Dates" are set forth in the memorandum attached to the Schedule. G. E. Finchney stated that the Sales Department would like to have the Model 11-43 in 410 and 28 gauges as early next year as possible and since maximum production of shotguns will amount to 134,000, these should be produced by reducing the quantity of the Model 870 to 60,000 for the year, and the 61,000 autoloaders now scheduled for the year should be made in 12, 16 and 20 gauges. H. K. Faulkner stated that he wanted time to study this situation to determine what the Plant would have to do in order to accomplish the desires of the Sales Department for these 28 and 410 gauge guns. It is understood that sixty 28 gauge will be ready by December 15 for field test and sixty 410 gauge by January 15 for test. These 410 gauge guns will be built to accommodate the 2-1/2" or 3" shells.

In regard to the Model 870, it was stated that the Plant would close the project for this gun by the end of this year.

In the discussion of the Models 740 and 760 Center Fire Rifles, it was decided that the dates for complete assembly of old models under Column (H) should be changed from June 1950 to "Complete".

Also, it was agreed that all entries opposite the Model 760 - 270 Winchester should be deleted including the entry 270 Winchester Caliber for the reason that there is still some doubt as to the practicability of applying this particular caliber to the Models 740 and 760 and more development work including an exploration of fluted chambers, is necessary before a definite decision is made.

- 1 -

FILE: Cal .222 Rem.	W/552	W/740
Gun Development Schedule	W/572	W/760
W/11-43	W/723	W/870
W/450		

J.S.HOFFMAN Absent - W.E.Gregg acted

Pages 1 & 2

The Model 723 Bolt Action (Target) Rifle, 222 Remington Caliber, has been deleted from the Schedule since it is doubtful that demand at this time is sufficient to justify its addition to the line and steel should be used for arms in greater demand.

Under Rim Fire Rifles, opposite the Model 552, under column (E), the tentative selling price has been entered as \$24.48 and the date for complete assembly of the old model under column (H) has been changed from June to September 1952. Also, under column (J), ten years has been changed to 15 years.

Opposite the Model 572, under column (E), the tentative selling price has been entered as \$22.64 and the date of complete assembly of the old model under column (H) has been changed from June to September 1952. Also, under column (J) ten years has been changed to fifteen years.

Opposite the Power Tool, Model 450, under "Announcement Date", column (D), the word (open) has been deleted and a date of July 1, 1951 has been entered. This change was made because present delivery schedules indicate that there will have been produced by June 30, 1951 a total of 525 gun kits and units and 325 of these will be in the Warehouse by May 31, 1951. July 1 was selected in preference to June 1 due to possibility of delays on raw material.

H. K. Faulkner made a general statement that availability of materials is becoming progressively more difficult and, therefore, some of the dates now set forth on the Arms Development Schedule may be affected later due to conditions prevailing in the market for raw materials.

Decision:

The Operations Committee (Arms Division) recommends to Management that the amended Arms Development Schedule incorporating changes set forth above be approved.

FILE: Cal .222 Rem.	M/552	M/740
Gun Development Schedule	M/572	M/760
M/11-'43	M/723	M/870
M/450		

COMPANY CONFIDENTIAL

REMINGTON ARMS COMPANY, INC.
Ilion Research Division

January 30, 1961

cc: G.M. Calhoun
S.M. Alvis ✓

XP-722

This model was shown to Sales and involved the 222 Caliber in a bolt action pistol. Sales did not indicate at the present time their interest in such a model, but indicated their general interest in the program which R&D feels has both a military as well as commercial potential.

The redesign of this model involving a shorter barrel with result that the model is one pound lighter, was shown to Sales and he revealed that if the performance of the smaller version of the XP-722 was satisfactory, a presentation will be made requesting permission to proceed into a semi-automatic, box fed magazine type pistol, and possibly a controlled burst, full automatic version of this model, which we feel would be desirable for military purposes.

Since our discussion with Sales some testing was conducted on the Armalite military rifle which is chambered for the 223 cartridge. It has been decided that the 223 would probably be the most desirable cartridge for this pistol, as the recoil was not excessive. However, the first model will be based on the 222, and after recoil measurements have been made and if they are found not to be excessive, the chamber will be increased to the 223 dimension.

Design Status

COMPANY CONFIDENTIAL

REMINGTON ARMS COMPANY, INC.
Ilion Research Division

cc: G.M. Calhoun
S.M. Alvis

February 13, 1961

XC-10 and XP-722

Model #2 of the XP-722 has been found to be very satisfactory during shooting tests. It is chambered for the standard 222 Rem. and has been hand fired at ranges from 50 yards to 300 yards with excellent accuracy. It is planned that this model will be shown by the Sales Department to General Lemay sometime this week, and it is hoped that he will give consideration for a meeting with Remington personnel concerning a semi-automatic weapon based on the XP-722.

It is believed the experimentation and design effort on this model can be used for military or commercial purposes. A mock-up model of the semi and controlled 2-shot burst pistol is being made in the event such a meeting can be arranged, as indicated above.

In the meantime experimentation in the loading of the 222 ammunition is being accomplished to tailor its function to a 10" barrel. It is believed that the original 222, which was shorter than the present one, would probably be the most desirable size case when using faster burning powders necessary to function efficiently in a short barrel. These measurements should reveal fairly close a correct combination, and it is planned to report results next week.

Meanwhile basic high spot costs of the military model will be made and estimates determined of what magnitude one and ten models will amount to in time and money. Also it is planned to make some penetration tests to determine the effect of a projectile of this caliber based on the measurements we obtained as far as velocity is concerned. This test will probably be conducted through steel plates comparable to material used in army helmets, at ranges up to 300 yards.

Design Status

MINUTE #5-1961
6-21-61

XP-722 PISTOL, 222 CALIBER

It is reported by Research & Development that costs involved in the short receiver for this item prevent a favorable return at current forecast levels. It is now planned to cost this item on the basis of using the same receiver as the XC-13 Bantamweight rifle. Some compromise of weight and appearance may be expected with incorporation of the XC-13 receiver.

The short barrels required for this item cannot be economically made on Ilion barrel equipment. Quotations from outside barrel manufacturers may be required.

MINUTE #6-1961

CENTER FIRE PISTOL

XP-700 PISTOL - 222 CALIBER

This item does not appear on the Development Schedule, but is in the status of design investigation.

The Production Department points out that the receiver design for this item is coupled to that of the Model 700 Bantamweight Rifle. The item, therefore, will form a part of any future project relating to the Model 700 Bantamweight.

The nomenclature of this item has been changed from XP-722 to XP-700, in order to carry the 700 designation throughout the line of bolt action guns.

MODEL 700 CARBINE

The Research & Development Department presented a prototype Model 700 Carbine for Committee review. This item comprises the basic Model 721 action in 30-06 caliber, a 20" barrel with simplified open sights, and a plain unpolished pistol grip stock formed from the 500 Model series stock blank.

The Production Department outlined economics for this item scaled for various production quantities and list prices of \$80, \$85 and \$90. Copies of these economics are attached to members' copies of the Minutes.

Discussion indicated that members of the Committee did not feel this model to be compatible with the proposed A and ADL Grades of the Model 700 from the standpoint of appearance and price. On the question of economics, it was felt that predicted volume of 5,000 guns would not insure an adequate return to Remington, although some justification could be made for producing this item for one or two years on an out-of-pocket economic basis.

The Sales Department proposes that the Model 700 Carbine be withdrawn from consideration as a January 1, 1962 item. In view of the possibility that lower cost bolt action rifles may be introduced by competition in 1962, the Sales Department further proposes that the Model 700 Carbine be kept in readiness. The Production Department states that this item can be manufactured to the warehouse in three months, if desired.

MODEL 700 BANTAMWEIGHT

A revised prototype of the Model 700 Bantamweight rifle was shown. Current specifications include a molded nylon stock, a ventilated rib sighting plane, and sights of Nylon 66 design. Probable weight of the production rifle is five pounds. Proposed calibers are 308 Winchester, 257 Roberts, 222 Remington and 30-30 Winchester. This item will be submitted by the Research & Development Department for economic evaluation along with the XP-700 pistol, inasmuch as these items use a common receiver.

CENTER FIRE PISTOL

XP-700 BOLT ACTION PISTOL

Research & Development reports that prototypes of this item have been tested. Velocities of 2700 fps have been achieved with the 222 Caliber 50 Grain bullet.

Sales forecast of 5,000 units exists for this item. Economics are being prepared jointly on this item and the Model 700 Bantamweight rifle.

MINUTE #10-1961

XP-700 BOLT ACTION PISTOL

Research and Development reports that improvements have been made to the sights, safety, and stock of this item. A sample with revised features will be prepared for Sales Department evaluation.

DRAFT

XP 700 Pistol and XC 13 Rifle

It has been assumed that the Pistol with nylon stock and Rifle with a wood Stock are to be added to the gun 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 XC 13 Rifle and Spts. 68 wood machines and a separate request for standard equipment for 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 up.

that custom checkering equipment will be completed and tied-in with modifications to stock tooling in time to start sustained stock production in the third week of February.

It was questioned by Sales whether die impressed checkering could be provided on Model 700 samples to be used at the NSGA show during the week of January 21, 1962. Rifles with die impressed checkering will probably not be available for this show and, additionally, the Patent Counsel has requested that no public display of die impressed checkering be made until a patent application is filed thereon, around February 1, 1962. Hand checkered samples may be used for display at the discretion of the Sales Department.

Writer's Guns

Current scheduling calls for shipping Model 700 ADL rifles in 7MM Remington Magnum caliber to gun editors on February 1, 1962. It is questioned whether these guns should be shipped at this date without die impressed checkering. The Sales Department wants no compromise in the specifications of guns shipped to editors and writers, and insists that specifications of these guns be identical to the product we will sell. The Research & Development and Production Departments expect that writers' guns can be shipped by February 15, 1962.

Test of 7MM Remington Magnum Caliber

Research & Development reports that acceptable accuracy has been achieved in test of the 7MM Remington Magnum caliber. This caliber will be tested in assembled guns in the near future.

Extractor

Research & Development is model testing a proposed riveted extractor in Magnum caliber rifles. Very good results have been obtained. Release of design is imminent, and it is expected that tooling for permanent operations on the riveted extractor will be completed by February 1, 1962. Use of unriveted extractors in 30-06 and related calibers of the Model 700 will be held to a minimum by scheduling production to first complete Caliber 222 assemblies. The 222 assemblies will not use the riveted extractor.

MODEL 700 BANTAMWEIGHT RIFLE AND RELATED PISTOL

New Finish

The Research & Development Department displayed a Model 700 Bantamweight rifle and an XP-700 Pistol, each provided with a semi-matte blue-black Parkerized finish. This finish is reported to be 10 to 20% more rust resistant than the best bluing processes.

MODEL 700 BANTAMWEIGHT (con't)

The Sales Department considers the dullness of the proposed finish to be a detriment to appearance which outweighs the 10-20% increase in corrosion resistance.

Sales Price and Factory Cost - Bantamweight Rifle

The Sales Department emphasized the importance of maintaining the proposed \$85.00 selling price for this item. It is felt that the rifle must compete directly in price with a plurality of hunting rifles in the \$85.00 range. Research & Development reports that material savings and use of the Model 500 stock blank indicate a factory profit of approximately 20%, on the basis of an \$85.00 list price. Preliminary cost figures are being formalized for submission to the Committee.

Appearance

Appearance features of the rifle and related pistol have not yet been finally resolved. It was agreed that the Sales and Research & Development Departments will formalize appearance features as soon as possible.

Release of Design

Research & Development reports that 85% of design drawings will be released to the Plant on January 17, 1962. Complete release of drawings is scheduled for February 1, 1962.

Project

The Project relative to these related items is in preparation and will be completed during the week of February 21. The Sales Department emphasizes that rifle forecast figures given for project preparation include the 30 Win. Caliber. If this Caliber is not to be available in 1963, forecast figures are subject to revision.

Scheduling

The controlling factors in scheduling of these items are the work effort required for January 1, 1963 introduction of several other models; the lead time necessary for molds for the XP-700 pistol stock; and the equipment required for the fabrication of the wood rifle stock. At the present time, a January 1, 1963 announcement date appears feasible for the XP-700 pistol, but long delivery dates for rifle stock manufacturing equipment indicate a completion date for the rifle which is several months into 1963. The Sales Department feels that April, 1963 is the latest practical date for announcement of this rifle.

Formal scheduling for this rifle and pistol will be presented at an early date.

Nomenclature

The Plant states a requirement for early determination of model numbers to be used on the rifle and pistol, so that process, tooling, and other records can be properly identified.

The Sales Department defines "XP-700" as the desired designation for the center fire pistol. Nomenclature to be used for the rifle will be determined at an early date for report to the Plant.

AUTOLOADING XC-6, LEVER ACTION XC-7, AND SLIDE ACTION XC-8 RIFLES

ADDITIONAL CENTER FIRE ITEMS

XC-11 LOW COST CENTER FIRE AUTOLOADER

MODEL 700 BANTAMWEIGHT RIFLE AND RELATED PISTOL

Nomenclature

In response to a Research and Development Department request, the Sales Department has selected the following model numbers to designate these items:

Model 600 Bolt Action Rifle
Model XP-100 Pistol

The trade names proposed by the Sales Department for these items are "Trailmaster", for the Model 600 rifle, and "222 Fireball" for the Model XP-100 Pistol.

Design Features

Model 600 Rifle - This item is currently based on use of Model 500 stock blanks for stock fabrication. Prototypes have been provided with black plastic fore end tips and a white line buttplate spacer. The Production Department has recommended the elimination of the black fore end tip and buttplate spacer to reduce cost, and feels that this step can be practically accomplished by use of a slightly longer stock blank which would provide an unbroken wood fore end of the same length and conformation as the prototype. A prototype without fore end tip or buttplate spacer will be prepared for Sales Department evaluation.

The Research and Development Department displayed a modification of the Model 600 rifle provided with styling features which might be used on a higher grade version. These features include a roll-marked receiver, decorated bolt and bolt plug, a trigger having its rearward portion shrouded within the trigger guard, a recoil pad, and roll-marked decoration of stock wood.

The Sales Department considers that consideration of a higher grade Model 600 should be deferred in favor of maximum effort on the single grade set forth in this project. It was pointed out that the first year forecast for this item, of 12,000 units, is based on May 1963 deliveries of a rifle having a list price of

\$85. It is most important that the single grade be available for May 1963 delivery.

Model XP-100 Pistol - There are no changes in design features to report.

Scheduling

Research and Development - The Ilion Development Schedule of March 6, 1962 establishes March 15, 1962 as the date at which Research and Development will finally release component part drawings of both rifle and pistol to the Plant. Approximately 85% of design has been released to date.

Production Department - Scheduling of production effort relative to the Model 600 rifle and Model XP-100 pistol is set forth on the Production Department chart attached to Member's and Management's copies of these Minutes.

With regard to the Model 600 rifle, it will be noted that stock machinery is the control factor in achievement of the scheduled warehouse date of May 1, 1963.

Sales Department - With regard to the Model 600 rifle, current scheduling allows 15 days between completion of pilot work and warehouse date. A sales acceptance test of production guns cannot be satisfactorily completed in this interim, even though the Bolt Action rifle will require less extensive testing than more complex types. Unless this proposed dates are changed to provide for sales acceptance tests before warehousing, there is the strong probability that announcement will have to be deferred. If announcement of this item is deferred, forecasts will have to be revised.

In the case of the XP-100 pistol, the November 15, 1962 Pilot Work Completion date is separated from the January 1, 1963 warehouse date to permit sales acceptance testing by December 15, 1962.

AUTOLOADING XC-6, LEVER ACTION XC-7, AND SLIDE ACTION XC-8 RIFLES

appearance samples of each stock will be presented to the May meeting of the Committee for approval.

The schedule for the Model 600 rifle (and XP100 pistol), a copy of which showing status is attached, indicates the project is behind schedule. This is due to the design items noted above that remain to be completed and to high priority being given to the Sportsman 68. The Production Department feels that the major part of the lost time will be recovered, but effort will not be sacrificed on the Sportsman 68 to do so.

In response to the Chairman's question of why an April introduction date was acceptable for this rifle in contrast to the generally accepted practice of first of the year introductions, the Sales Department stated that an exception was made for the Model 600 because of the specialized nature of the rifle. Introduction later in the year will also avoid conflict with the earlier sales promotion of the Sportsman 68.

XP100 PISTOL

The Research and Development Department reported that the design of the XP-100 pistol is also complete and has been released except for the vent rib and sights. The method of fastening the rib to the barrel appears to have been defined and the design will be completed shortly.

The status of the schedule for the pistol is the same as the Model 600 rifle at this stage, and is attached. The time by which the pistol lags the schedule is expected to be recovered but effort will not be sacrificed on the Sportsman 68 to do so.

The Sales Department announced that the cartridge for the XP-100 pistol will be known as the 221 Remington "FIREBALL". This description will appear on the cartridge box and will be roll marked on the barrel of the pistol.

An appearance sample will be presented to the Committee at the May meeting for approval prior to submission to Management as a production prototype. The appearance sample will have a wood stock instead of nylon since the nylon dies will not be available until later in the year. It was felt that the expense of machining a nylon stock is not justified for this purpose.

Magnums of 7mm and .264. This represents approximately 42% of the total ADL orders on hand. Twenty-seven caliber 7 mm have been supplied to writers on special orders by the Research and Development Department.

The revisions to the bolt head and extractor for the 7mm and .264 Magnum calibers were the last to be completed and both Magnum calibers are expected to be warehoused in early May.

The Production Department stated that the increased rate of ADL production had been achieved through overtime in the Wood Shop. The efficiency of the Wood Shop is increasing as the performance of several new employees improves. The production of ADL grade is expected to equal orders during May and at which time a warehouse stock will begin to be accumulated. The warehouse stock will help cover ADL orders during the period of BDL production.

The BDL grade will be in production in the next few weeks when adequate means of providing a fore-end tip are in hand.

A prototype BDL was displayed with an all sewn, non-riveted sling strap. This was approved by the Committee. The BDL is expected to be warehoused in June and will complete the Model 700 line, replacing the Models 721, 722, and 725.

COMMITTEE ACTION - The Operations Committee recommends General Management approval to discontinue immediately the Model 721 and 722. The Model 700 ADL replacing the Models 721 and 722 was approved by General Management for invoice shipments, per Minutes #3-1962, page 7. It is further recommended that General Management approve the discontinuance of the Model 725 effective with the availability of the Model 700 BDL for invoice shipment.

XP-100 BOLT ACTION PISTOL

The project schedule for the XP-100 Pistol indicates that it is about six weeks behind schedule as reported last month. The work on the Sportsman 68 and the need for final approval of the rear sight to complete special machine design prevented recovery of any lost time. The tool design on all components originally released has been completed. Pilot operations are in progress on the barrel and will start on the receiver and bolt plug when production machines can be released. The Research and Development Department presented a prototype of the pistol for Committee approval. The prototype model has a wood stock rather than nylon, to avoid the expense and delay of machining one of nylon. The Production model will have a molded nylon stock.

The Sales Department requested time to review the prototype pistol. They assumed responsibility for obtaining Committee approval by May 15. The urgency for approval is associated primarily with the rear sight which is common to the Model 600 rifle, and would be extended to the nylon stock rim fire line of Nylon 10, 11, 12, 66 and 76, if so approved. The volume of the nylon stock rim fire line would justify special machines for the new sight. The availability of these machines will reduce product cost of the XP-100 pistol and Model 600 rifle. Models of the Nylon 11 and 66 fitted with the new type rear sight were left with the Sales Department and the Committee to review for approval.

MODEL 600 TRAILMASTER RIFLE

The project for the rifle is on schedule, with start of warehouse production planned for mid-March, 1963.

The prototype of the rifle, having the proposed rear sight as discussed with the XP-100 pistol above, was presented for Committee approval. Approval was deferred, pending further consideration by the Sales Department. The Sales Department assumed responsibility for obtaining approval of the prototype by May 15.

MODEL 742 AUTOLOADER - CALIBER 243 WINCHESTER

The Sales Department reported on the need for the caliber 243 in the Model 742 autoloader. They stated that Winchester is supplying this caliber in their Model 100 autoloading rifle. This will provide Winchester with a competitive advantage in a caliber size in which Remington has no corresponding offering in the Model 742. The Sales Department cited the increased competition in the autoloading center fire line during the past three years from the Winchester Model 100 and the Ruger "Deerstalker". The disadvantage of lacking a competitive caliber provides further means of competitive inroads.

The Sales Department contrasted the caliber 243 with the caliber 244. Some states have anti-maiming game laws that prohibit the use of bullets weighing less than 100 grains for general hunting. They pointed out that the increasing popularity of the caliber 243 is, in part at least, due to the availability of a high velocity 100 grain hunting weight bullet as well as an 80 grain varmit weight bullet. The caliber 244, on the other hand, is only available in varmit weights of 75 and 90 grain.

The Production and Research and Development Departments indicated that changes will probably be required to the magazine and cartridge feed and to the orifice in the gas system.

The Committee requested that the Research and Development and Production Departments determine the design changes necessary,

MINUTE #9-1962

FROM PAGE NUMBER

2

MAJOR SUBJECT

1963 Firearms Line

SUB SUBJECT

Center Fire Rifles + Pistols (L.P. 100 Pistol)

1963 FIREARMS LINE

The Committee discussed the projected 1963 firearms line. The attached table indicates the 1962 line, the anticipated changes for 1963 and the resultant 1963 line. The projected changes may be summarized as follows:

Shotguns

Sportsman 68

-Add model in 12 gauge, 2 3/4" and 3" Magnum.

Sportsman 58

-Drop 12 gauge, providing 1,000 to 3,000 12 gauge carry over as back-up for Sportsman 68.

Model 878

-Discontinue model.

Center Fire Rifles and Pistols

XP-100 Pistol

-Add model in caliber 221 Fireball.

Model 600

-Add model in caliber 308 Winchester & 30-30 Winchester.

Model 742

-Add caliber 243 Winchester to A & ADL grades during 1962.

Caliber 6mm

-Sales discussing with Bridgeport and Ilion the possibility of adding this caliber for 1963 in some model to capitalize on 7mm acceptance.

Rim Fire Rifles

Models 510, 511 and 512

-Discontinue models during 1962.

General

Wood and Metal Finish

-The Production Department is determining means to improve the wood and the metal finish for the Sportsman 68. It may be desirable to extend the improved finishes to the major

MINUTE #9-1962

FROM PAGE NUMBER

2

MAJOR SUBJECT

1963 Firearms Line

SUB SUBJECT

Custom Checkering

models such as the Models 870,
700, 742, 760 and Sportsman 58.

-The Sales Department requested
that custom checkering be
extended to other major models.
Sales will indicate the models
and their order of preference.
The Production Department will
determine the start-up and
additional factory costs and
the time to accomplish.

MINUTE #9-1962

FROM PAGE NUMBER 4

MAJOR SUBJECT

SUB SUBJECT

*Sportsman 68 Autoloaded
Sales Introduction (L.P. 100)*

The Sales Department discussed their advertising strategy for the three new items in the 1963 firearms line. Their goal is maximum advertising value for each with minimum competition between them. The Sales Department intends to divulge the Sportsman 68 to selected writers in October with their stories to be released in January. The writers will be shown the XP-100 pistol and Model 600 rifle in January. At that time, the Sales Department feels the writers will be committed to following through with their articles on Sportsman 68 and at the same time be committed to additional material on the pistol and rifle in order to avoid being "scooped" by other writers.

- stock duplicates the Sportsman 58. Prototype shotguns to these measurements were provided for the Regional Sales Managers to shoot at Bridgeport the end of May. Their general concensus was that the drop and pointing characteristics of the Sportsman 68 are equivalent to the Sportsman 58.

Carrier

- A flatter carrier has been approved by the Committee.

CENTER FIRE RIFLES AND PISTOLS

MODEL 700 BOLT ACTION RIFLE

The Production Department reported that 9,500 Model 700's have been produced to date including 25 BDL grade that are beginning to come through the line. All nine ADL calibers including 7MM Remington Magnum and 264 Winchester Magnum have been warehoused. It is felt that the problems of the BDL grade are in hand and the production of 2,500 is scheduled in June.

A current production BDL sample was shown to the Committee and will be taken to Bridgeport for display to General Management.

General Management approved on May 23, 1962 the Committee's recommendations to discontinue the Models 721, 722, and 725.

XP-100 BOLT ACTION PISTOL

Project Status

The Production Department reported that the XP-100 pistol continues to be approximately six weeks behind schedule as a result of the higher priority given the Sportsman 68. Effort continues to warehouse pistols in January, 1963, short of interfering with the Sportsman 68. The marketing strategy discussed in conjunction with the Sportsman 68, whereby the XP-100 pistol will probably not be announced until two months after the Sportsman 68, does not in any way affect the goal warehouse date of the pistol.

The sustained high production rate of the Model 700 rifle will create some interference with pilot operations on the pistol since several operations for both are performed on the same machines. Priority will be given to Model 700 production and the pilot

operations for the pistol worked in to the best extent possible. Research and Development indicated that the nylon dies for the stock are two weeks behind schedule. Research and Development will work through vacation to recover this time.

The approval status of the pistol is that the basic prototype has been approved by both Management and the Committee. Subsequent to these approvals, the following changes have been made that have been displayed to and approved by the Committee only:

- | | |
|---------------|--|
| Barrel Length | - Increased 3/4" to gain 80 ft. per second muzzle velocity. |
| Rear Sight | - The Sales Department had requested the Allen Head adjustment screws be changed to slotted head screws. However, these screws are very small. Research and Development recommends that best experience will result if the elevation and windage screws are the Allen Head type, requiring the same size wrench. The Committee concurred. It was suggested that an Allen Head wrench for these screws be packaged with the pistol. This latter point was not resolved. |
| Bolt Handle | - The shape of the bolt handle, which is common to the Model 600 rifle, has been modified slightly to accommodate on the rifle a newly offered adjustable power scope. |

MODEL 600 "TRAILMASTER" RIFLE

The Production Department reported that the Model 600 rifle is on schedule to warehouse in mid-March, 1963.

The Research and Development Department reported that a model in 30-30 caliber has been completed to begin tests. The timing for commercial availability of 30-30 caliber will depend upon the test results, the need for any indicated redesign, and the process work to get into production.

The Committee reviewed two prototype models of the rifle. One was that originally approved by the Committee at the May meeting and subsequently presented to General Management for approval. The second included additional features of Custom Checkering, and an alternative shaping of the grip section which Management requested to upgrade the appearance. After discussion of the following factors, the Committee recommends that the original prototype as approved by the Committee at the May meeting be considered as the approved prototype for production:

A major concept of the Model 600 rifle is to compete with the Winchester Model 94 at the same \$85.00 selling price. Further improvement to the features of the Model 600 would reduce its profit margin which is now projected at \$4.21. It would also cause it to closely approach the features of the Model 700 ADL, retailing for \$114.95 with a projected profit margin of \$6.42. Any resultant substitution of Model 600 sales for Model 700 sales will reduce earnings due to the lower profit margin of the Model 600.

The Model 600 has several other quality features such as the vent rib and Monte Carlo stock, not available in another rifle in this price class.

The mid-March, 1963 warehouse date would be jeopardized by the time to finally complete and process a checkering design and stock change.

The Committee also reviewed the rear sight and revised bolt handle shape as discussed in conjunction with the XP-100 pistol.

The approval status of the rifle is that the prototype as submitted at the May meeting with the changes noted below has been approved by the Committee:

Rear Sight

- The Sales Department had requested the Allen Head adjustment screws be changed to slotted head screws. However, these screws are very small. Research and Development recommends that best experience will result if the elevation and windage screws are the Allen Head type, requiring the same size wrench. The Committee concurred. It was suggested that an Allen Head wrench for these screws be packaged with the rifle. This latter point was not resolved.

Bolt Handle

- The shape of the bolt handle has been modified slightly to accommodate a newly offered adjustable power scope.

MODEL 742 AUTOLOADING RIFLE - CALIBER 243 WINCHESTER

The Production Department reported that rifles in Caliber 243 will be ready to test the end of June. The Sales Department indicated the desire to announce the availability of this caliber as quickly as the test results indicate that it can be satisfactorily manufactured. The Production Department will keep the Sales Department advised on the progress of the tests and when a warehouse quantity can be available.

XC-6 AUTOLOADING RIFLE
XC-7 LEVER ACTION RIFLE
XC-8 SLIDE ACTION RIFLE

The Research and Development Department displayed prototype models of each. These samples will be taken to Bridgeport by Research and Development for further discussion with Sales.

XP-100 A AUTOLOADING PISTOL

A shooting model mounted in a shooting block was displayed to the Committee. The model has been fired single shot only and functions satisfactorily. A box magazine is being fabricated to begin semi-automatic shooting.

RIM FIRE RIFLESXR-5 LOW COST SINGLE SHOT RIM FIRE RIFLE

The Research and Development Department displayed color renderings of a straight stock and a modern stock version of the rolling block rifle. Both incorporated rounded rather than sharp edges and a modern design hammer as previously requested by the Committee. Engineering study has indicated that a cast aluminum rather than cast zinc receiver will be required for strength considerations. The receiver will be common for both 22 Winchester Rim Fire Magnum and conventional 22's.

The cost and various implications of this model were discussed by the Committee. The preliminary economics completed two months prior indicated that the replacement of the Model 514 by this rolling block rifle would provide increased operative earnings before taxes of \$135,000. This was based on a rolling block rifle yearly volume of 45,000, retailing for \$20.95, with an out-of-pocket factory cost of \$6.56. The aluminum receiver will increase this cost slightly.

with outlines of the proposed patterns will be discussed by Sales with General Management concerning: use of the same pattern for all Custom Checkered grades within a given model; use of the same checkering patterns on different models to the extent possible; two grades versus single grade structure.

SHOTGUNS

SPORTSMAN 68 AUTOLOADER

The Production Department reported project work on the Sportsman 68 remains approximately two months behind schedule. Steps continue to recover the lost time and warehouse the shotgun January 15, 1963 as scheduled. A new scheduling system is being established, indicating all necessary work to complete each step in the production sequence of major components. Trial and Pilot operations will continue through the vacation shut-down.

The status of the other new guns, the XP-100 pistol and Model 600 rifle, are periodically reviewed to determine that they will not interfere with the Sportsman 68.

Research and Development reported no information significantly affecting the adequacy of the Sportsman 68 design has come to light during the past month. The design changes that have become evident will not interfere with the project schedule. Items of note are:

1. The interceptor latch which was reported to have failed at approximately 3,000 rounds has been improved and dry cycle testing indicated 75,000 rounds endurance without failure.
2. The breech bolt of the 2 3/4" chamber shotgun was previously reported to have cracked during endurance testing but did not fail. It was planned to make a design and material change to correct this. Subsequently, the design change and a polishing operation in critical areas was determined to suffice instead of changing material.

Chrome plating the bolt, carried over from the Sportsman 58 to prevent rusting prior to purchase by the consumer, contributes to cracking due to hydrogen embrittlement. Research proposes that as a further preventive the breech bolt of Trap and Skeet guns be highly polished rather than chrome plated.

The Production Department reported that it may be desirable to highly polish rather than chrome plate all Sportsman 68 breech bolts. The chrome plating does not allow the roll marking to show up clearly.

MINUTE #11-1962

FROM PAGE NUMBER

MAJOR SUBJECT

SUB SUBJECT

XP-100 BOLT ACTION PISTOL

July, 1962
8
96 P. 100 B. A. Pistol

The Production Department reported that the XP-100 pistol continues approximately six weeks behind schedule as reported at the last meeting. The new scheduling system being established for the Sportsman 68 is also being extended to the XP-100 pistol and Model 600 rifle to clearly indicate all work required to complete each step in the production sequence of major components. Research and Development reported that the stock dies are expected the end of July to begin molding stocks during the vacation shut-down. It is still expected to meet the January warehouse date.

Preference continues to be given to Model 700 rifle production where operations conflict with XP-100 or Model 600 Trial and Pilot. The pistol interferes least with Model 700 production and could be more easily produced concurrent with Model 700's should any question of deferring either the pistol or rifle occur.

The approval status of the pistol is that the basic prototype has been approved by both Management and the Committee with the following changes having been presented to and approved by the Committee only:

- | | |
|---------------|--|
| Barrel Length | -Increased 3/4" to gain 80 ft. per second muzzle velocity. |
| Bolt Handle | -The shape of the bolt handle, which is common to the Model 600 rifle, has been modified slightly to accommodate on the rifle a newly offered adjustable power scope. |
| Rear Sight | -Allen Head screws requiring the same size wrench have been incorporated for windage and elevation adjustment. A suggestion at the June meeting that a wrench to fit these screws be packaged with the pistol was not resolved at that meeting. The Chairman requested this be done outside the Committee. |

MINUTE #11-1962

(July 10 - 1962)

FROM PAGE NUMBER

11

MAJOR SUBJECT

Pistols - X P 100 A - Autoloading Pistol

SUB SUBJECT

XP-100 A AUTOLOADING PISTOL

Research and Development displayed a 10 shot semi-automatic model of the XP-100 A. They reported that testing of the model, which may have good military potential, is proceeding satisfactorily.

ca

MINUTE #13-1962

(August, 1962)

FROM PAGE NUMBER

6

MAJOR SUBJECT

Model XP-100 R. A. Pistol

SUB SUBJECT

MODEL XP-100 BOLT ACTION PISTOL

The Production Department reported that the pistol continues six to eight weeks behind schedule. The limitation is delay of machines, tooling and purchase components. The Production Department still expects to begin pilot assembly in October through expediting and by-pass operations.

Research reported the first nylon stocks molded had some warpage, which is usually expected on initial product. The mold is being altered by the vendor, and will be returned to mold stocks in early September.

Research also reported that they are considering increasing the twist from 1 in 14" to 1 in 12" to accommodate future light weight bullets. The first production of 700 barrels in progress will have 1 in 14" twist. Subsequently barrels will incorporate any revised twist established.

Sales expressed their intention to develop advertising for the pistol around its unique long range accuracy. They are considering having some of the country's outstanding pistol shooters and gun writers preview the pistol in October.

MINUTE 15-1962

(October, 1962)

ITEM NO. 5

MODEL NAME Model X P-100 Bolt Action Pistol

MODEL XP-100 BOLT ACTION PISTOL

Project Status

Production reported the pistol is on schedule and approximately 40 will be available from the pilot lot about November 10. The receiver, which is machined on heavily committed Model 700 equipment, will limit production after this initial quantity is assembled. About 200 pistols will be in the warehouse January 1.

Sales stated the 200 warehouse quantity is less than desirable, even though the true market potential of the pistol is unknown. Sales expects to have a better estimate of 1963 sales after the February Dealer Show in Chicago. This event proved a good barometer in 1962 for the Model 700 rifle.

The Production Department is determining if any government regulations must be met or permits are needed to ship pistols.

Sales Promotion

Sales has abandoned plans to demonstrate the pistol to writers in October. They will instead probably display it at Lordship along

with the Model 1100 the end of November. This is compatible with the Project schedule.

The Treasurer suggested sales volume would benefit if a new target event could be successfully promoted in which only the XP-100 is capable of competing. Sales agreed, stating their intention to promote the pistol for target and varmint shooting, as a pistol with rifle accuracy. The standard accuracy specifications will be determined as pilot models are tested. For the present, rifle specifications are being used.

The Sales Department displayed their proposed package of "Royalite" simulated leather case with three quarter zipper. The pistol and a box of ammunition are supported within formed recesses of a red plastic liner. The dealer would insert the box of ammunition. A pressure sensitive label on the outside identifies the product. The package costs about \$1.50.

Sales will ask General Management's approval of the package. Sales will also supply the Production Department the necessary information to obtain quotes and samples for shipping tests.

with the Model 1100 the end of November. This is compatible with the Project schedule.

The Treasurer suggested sales volume would benefit if a new target event could be successfully promoted in which only the XP-100 is capable of competing. Sales agreed, stating their intention to promote the pistol for target and varmint shooting, as a pistol with rifle accuracy. The standard accuracy specifications will be determined as pilot models are tested. For the present, rifle specifications are being used.

The Sales Department displayed their proposed package of "Royalite" simulated leather case with three quarter zipper. The pistol and a box of ammunition are supported within formed recesses of a red plastic liner. The dealer would insert the box of ammunition. A pressure sensitive label on the outside identifies the product. The package costs about \$1.50.

Sales will ask General Management's approval of the package. Sales will also supply the Production Department the necessary information to obtain quotes and samples for shipping tests.

MODEL 600 BOLT ACTION RIFLE

Project Status

Production states caliber 308 is on schedule to warehouse May 1. Receivers and stocks are the control items in this schedule. Model 600 receivers are produced on critical Model 700 equipment. Stocks are to be produced on new equipment being procured. The estimated warehouse date for caliber 30-30 is January, 1964, based on the scheduled May, 1963 design completion date.

The Sales Department feels the decision not to announce caliber 308 until caliber 30-30 is available should be reviewed because of the indicated eight months delay. The Committee recalled the project assumed no major difference between rifle designs for the rimmed and rimless cartridges. They agreed a current appraisal should be made, of Project economics based on present 30-30 design basis before a recommendation is made. The Sales Department will revise the XP-100 and Model 600 Sales forecast by calibers for the first year without 30-30 and for third year with all calibers. Research and Production will complete a current appraisal for the November or December meeting.

The Sales Department questions whether the Model 600 barrel length meets Canadian Government regulations, and asked Research to resolve this.

Design Status

Research has abandoned the rotary box magazine for caliber 30-30 due to space limitations. Their development is now based on a single column detachable box magazine with cartridges staggered one rim ahead of the other. This design may not be as different from the design for a rimless cartridge as previously thought. Room to detach the magazine without hinging the trigger guard may be available by removing the lower locking lug and moving the box magazine forward to occupy part of the space of the lower locking lug support. One locking lug may provide sufficient strength with the lower bolt head force and closer head space control of caliber 30-30.

CALIBER 6MM REMINGTON

Function testing of .243 Winchester (equivalent to 6MM) in Model 742 rifles has been satisfactory. Only acceptable accuracy is needed to announce this caliber in the Models 742, 760 and 700.

Research reported preliminary tests at Bridgeport indicate an 8" twist provides satisfactory accuracy for bullet weights between 75 and 110 grains. The accuracy of heavier 105 and 110 grain bullets with a 10" twist is not acceptable. Ilion Research is making a quantity of 8" twist barrels to confirm Bridgeport's results.

Sales questioned the integrity of classing the 6MM as a Magnum. Research agreed and Sales stated that the designation will be 6MM Remington.

RIM FIRE RIFLESRIM FIRE RIFLE SIGHTS

Research stated that the present Patridge-type sight on the Nylon line was designed in response to Trade requests as the best means of eliminating elevation and canting errors. They reviewed the new sights on the KP-100 pistol and Model 600 rifle that are intended for low cost volume production and could be used across the rim fire and low cost center fire line.

The Chairman asked the Sales Department to establish the sight specifications they feel are needed, and to recommend, with Research, a course of action to the Committee.

MODEL 40 X TARGET RIFLE

The prototype improved Model 40X is delayed by model making for the

REMINGTON ARMS COMPANY, INC.
Ilion Research Division

November 9, 1962

MEMORANDUM

PACKAGE TEST FOR THE XP-100

At
Mohawk Containers, New Hartford, N.Y.

GENERAL

The writer, in company with W.T. Smith of Purchasing, observed the results of a vibration or "shake" test on the sample pistol case proposed by Leaming Industries. A laboratory drop test was also conducted on the same package.

SUMMARY

The pistol itself showed no damage as result of the test conducted at this plant. The case showed only minor damage as result of the test. This damage appeared to be on all 4 corners of the inner styrene platform, and which became somewhat more pronounced after the 3-foot drops.

DETAILS

The vibration or shake test comprised a total of one hour. Hardly noticeable abrasion occurred on the exterior of the case during the final 10 minutes of the vibration test. However, this was rubbed away and is hardly perceptible.

Nine (9) "drops" were made to the package (with the pistol enclosed) from a 2-foot height. These were dropped according to the prescribed corrugated testing procedure from various corners, flats and ends of the package. An additional 4 drops were made from a 3-foot height. These were flat and corner drops. The pistol case was at all times enclosed tightly in a single corrugated one piece shipper.

JFF:T

J. F. Finnegan
Ilion Research Division

MINUTE 17-1962

FROM PAGE NUMBER 4

MAJOR SUBJECT

Model X P-100 Bolt Action Pistol

SUB SUBJECT

Production Status, Field Tests, Sales Promotion

MODEL XP-100 BOLT ACTION PISTOL

Production Status

Production reported satisfactory test results of the pilot lot. Approximately 100 pistols will be assembled during November as

production parts are available and nylon molding improvements are completed.

The Plant meets all regulations to manufacture and ship pistols to jobbers. Only the need for a gunsmith's license for Custom Repair has to be confirmed. Shipment to individuals such as Field Representatives is not a problem except in New York State where they must have a pistol permit. It is Sales responsibility to see that any individual on whom a shipping order is issued meets the legal requirement.

The packing case has been approved by Management. A production quantity is on order. The price of the pistol will be raised to cover the increased packaging cost.

The Committee stressed keeping the pistol confidential to prevent any leak to news media that could jeopardize promoting the Model 1100 shotgun. Production stated the assembly operation is in a separate, limited access area, with the pistols under strict control.

Field Tests

Sales has arranged with Production and Research for 12 pistols from the pilot lot to be shipped to Field Representatives the week of November 12 for testing. The pistols will be adequate to test functioning and accuracy, and minor imperfections in the nylon parts will be ignored. The nylon molds are being corrected for production pistols. The field test samples will be shipped in the approved case.

Sales Promotion

The November 26 writer's shoot at Lordship is being restricted to the Model 1100 for maximum-promotional value to it. The pistol will be promoted at a later date.

MINUTE #17-1962

FROM PAGE NUMBER

MAJOR SUBJECT

SUB SUBJECT

5
Model 600 Bolt Action Rifle
Production Status, Design & Test Status,

MODEL 600 BOLT ACTION RIFLE

Production Status

Activity on the Model 600 is limited by the higher priority requirement of the Model 1100 and XP-100. Pilot work will soon be getting more active to meet the May 1 Warehouse date for caliber 308. Approximately 100 of this caliber will be assembled in February for trial and pilot.

A current appraisal of the project economics to reflect the design differences between rimmed and rimless calibers will be completed in early December. Sales maintains their position to hold announcing the rifle until caliber 30-30 is available. This will delay announcement nine months from April 1, 1963 to January 1, 1964. However, Sales states they may reconsider their position when the extent of

1963 competition is known.

Design and Test Status

Parts to assemble and test a caliber 30-30 rifle are being machined.

Research established that the barrel length of the Model 600 will meet Canadian regulations. Canada permits manufacturing a barrel to any length, but rules against the shooter cutting off the barrel.

DRAFT

XP 700 Pistol and XC 13 Rifle

It has been assumed that the Pistol with nylon stock and Rifle with a wood Stock are to be added to the gun 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 XC 13 Rifle and Spts. 68 wood machines and a separate request for standard equipment for 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 up.

MINUTE #1-1963

FROM PAGE NUMBER

MAJOR SUBJECT

SUB SUBJECT

³
Model XP-100 B A. Pistol

MODEL XP-100 BOLT ACTION PISTOL

Design and Testing Status

Sales and Research reported good field test results with no indication of problems needing correction. Outstanding accuracy is being obtained in both Field and Research tests with 2" groups at 100 yards not being unusual for skilled hand gun shooters using a bench rest and pistol scope sight.

Sales asked Research to supply them information on suitable telescope models and prices.

Research is investigating an improved open rear sight that could either be offered as an accessory or made available through gun sight manufacturers. The improved rear sight provides the finer adjustment that may be needed by expert target shooters.

Production Status

Pistols are being produced to the warehouse with approximately 100 warehoused through December and another 2,000 scheduled by the end of the first quarter. The first 700 of these will have the 14 inch twist originally specified. Barrels with 12 inch twist will begin coming through the line the end of January. Writers' guns will be assembled with 12 inch twist barrels.

The Plant stated that they meet all regulations to manufacture and ship pistols to jobbers. Only the need for a gunsmith license for Custom Repair remains to be resolved.

A production sample was displayed to and approved by the Committee. The Sales Department questioned the trigger pull which appeared to them to have a double rather than a sustained take-up. Research stated this is a matter of trigger adjustment.

Committee Action

The Committee recommends General Management approve the production sample XP-100 pistol for invoiced shipment.

Selling Price

The Committee reviewed information that became available shortly before the meeting on pistol costs including the new package and its effect on operative earnings and profit margin. This information will be confirmed to the Sales Department to assist them in establishing the selling price for the pistol.

sample XP-100 pistol for invoiced shipment.

Selling Price

The Committee reviewed information that became available shortly before the meeting on pistol costs including the new package and its effect on operative earnings and profit margin. This information will be confirmed to the Sales Department to assist them in establishing the selling price for the pistol.

MODEL 600 BOLT ACTION RIFLE

Production Status

The trial and pilot of caliber 308 is behind schedule due to the priority given to the Model 1100 and XP-100. Production still expects they could meet the May 1 warehouse schedule if it is the Committee's decision they do so. The Committee has previously indicated the introduction of caliber 308 will be delayed until caliber 30-30 is also available which may be January, 1964. Production questions committing inventory and machines to warehousing the 308 in May if it will not be sold until January, 1964. In addition, the Model 700 rifle, XP-100 pistol, and a possible 5000 Model 40X-B Government order will place heavy demands on the same production equipment. Deferring the warehouse date for caliber 308 until late 1963 would help level out the Plant's force requirements by the Model 600 production taking up the slack the end of 1963 when the years other centerfire bolt action requirements will have been completed.

The Committee concurred that the Plant should only commit material and inventory to complete the trial and pilot and should not plan to warehouse caliber 308 by May 1.

Design and Test Status

Research will have a prototype model of the three contemplated calibers, .222, .308, and 30-30 within the next 2 weeks. They suggest a meeting to discuss them with Sales at Bridgeport, to which the Sales Department concurred.

The Committee reviewed a current appraisal of the economics for the Model 600 rifle that up-dates the original project for both lower forecast total plant volume and the estimated effect of design differences for caliber 30-30. Comparative data are shown in Table 1. The first column represents the project economics as originally prepared in which it was assumed that the product cost for caliber 30-30 would be essentially the same as the other calibers. The project cost included an estimated \$49,000 Operation and Research charges for caliber 30-30.

MINUTE #1-1963

TABLE 1.

PROJECT AD-XP-700-2
CURRENT APPRAISAL OF ECONOMICS FOR EFFECT
OF CHANGE IN TOTAL PLANT VOLUME AND
DESIGN DIFFERENCES FOR CALIBER 30-30
Data Shown For Model 600 Rifle Only

Original Project*		Adjusted For Change In Total Plant Volume		Adjusted For Changes In Total Plant Volume & Design Differences For Caliber 30-30		
Model 600		Model 600		Model 600		
.308	.30-30	.308	.30-30	.308	.30-30	Total
.222		.222		.222		

TOTAL PLANT VOLUME 3'

UNIT FULL COST DATA

Volume
Retail Price \$ \$
Net Selling
Operative Earnings
% of Net Selling

CASH COST DATA - M\$

Sales \$
Cost of Goods \$
Operative Earnings \$

Net Earnings \$

Investment

Permanent ** \$
Working Capital
Total Capital Req'd

Return On Total
Capital Required

Project Cost

 .308, .222 \$
 .30-30
Total - M-600 \$

* Adjusted for current 6% All Other Expense Rate instead of 8% in effect when project was prepared.

** Total permanent investment authorized by Project AD-XP-700-2 for M-600 rifle and XP-100 pistol. Amount shown is that allocated to rifle.

CONFIDENTIAL

VP-100

OPERATIONS COMMITTEE
ILION DIVISION

ILION
BULLETIN
#5-1963

M. R. Warden
R. H. Coleman
E. H. Bleckwell
H. K. Faulkner
Dewey Godfrey
H. M. Stoessel
Gail Evans
G. M. Calhoun

F. E. Morgan
D. E. Miller
H. M. Pierce, Jr.
S. M. Alvis
D. S. Foote
C. H. Reinhard
E. B. Wallin
L. D. Cox

COPY NO. 4

INFORMATIVE BULLETIN #5-1963
ILION DIVISION
JANUARY 10, 1963

SUBJECT: APPROVAL FOR INVOICED SHIPMENT
XP-100 BOLT ACTION PISTOL

On January 9, 1963, General Management approved the XP-100 Bolt Action Pistol for invoiced shipment. The existence of the pistol, however, should remain confidential until it is announced by the Sales Department.

L. D. Cox
L. D. COX
Secretary,
Ilion Division

LIMITED DISTRIBUTION

cc: E. H. Bleckwell
G. M. Calhoun
H. M. Stoessel
H. K. Faulkner
F. E. Morgan
S. M. Alvis
D. E. Miller
File

Ilion, New York
January 25, 1963

GAIL EVANS
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:

- 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 308, 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.

Supplementary details are covered in the attached discussion.

file 9/10/40
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
L. D. Cox

LDC:ms

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 \$.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 than 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:

<u>Retail Selling Price</u>	<u>Operative Earnings (Based On Out-of-Pocket Costs)</u>
\$ 85	\$ 16.
\$ 95	\$ 21.
\$105	\$ 26.
\$115	\$ 31.

Figure 3 - 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%.

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

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.

<u>XP-100 PISTOL VOLUME</u>	<u>RETAIL SELLING PRICE FOR 20% RETURN ON TOTAL CAPITAL REQUIRED</u>
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

	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
Retail Selling Price	\$75.00	\$85.00		\$75.00	\$85.00	\$85.00	
Net Selling Price	\$40.37	\$45.74		\$40.37	\$45.74	\$45.74	
Net Sales	\$ 121M	\$ 686M	\$ 807M	\$ 121M	\$ 412M	\$ 274M	\$ 686M
Cost Of Goods	<u>73M</u>	<u>408M</u>	<u>481M</u>	<u>90M</u>	<u>263M</u>	<u>183M</u>	<u>\$ 536M</u>
Operative Earnings	\$ 48M	\$ 278M	\$ 326M	\$ 31M	\$ 149M	\$ 91M	\$ 271M
Net Earnings	\$ 22M**	\$ 125M**	\$ 147M**	\$ 13M	\$ 68M	\$ 41M	\$ 122M
Investment							
Permanent (Allocated)	\$ 79M	\$ 101M	\$ 180M	\$ 85M	\$ 88M	\$ -	\$ 173M
Working Capital	<u>82M</u>	<u>399M</u>	<u>481M</u>	<u>83M</u>	<u>249M</u>	<u>170M</u>	<u>502M</u>
Total Capital Required	\$ 161M	\$ 500M	\$ 661M	\$ 168M	\$ 337M	\$ 170M	\$ 675M
Percent Return On Total Capital Required	14%	25%	22%	8%	20%	24%	18%
Operations & Research Costs	\$ 215M		\$ 215M	\$ 222M			\$ 222M
308 & 222		\$ 228M	\$ 228M		\$ 233M		233M
30-30		49M	49M			110M	110M
Total Project Cost							
(Permanent Investment and Operations and Research Costs)	\$ 294M	\$ 378M	\$ 672M	\$ 307M	\$ 321M	\$ 110M	\$ 738M

* Production cost assumed same as .308 and .222

** Adjusted for 6% All Other Expense Rate Instead of 8% In Effect When Original Project Was Prepared

PROJECT AD-AP-700-2
EFFECT OF SELLING PRICE ON PROFIT MARGIN OF
XP-100 PISTOL AND MODEL 600 RIFLE
FULL BOOK COST BASIS
UNIT COST DATA PER M&S ESTIMATES OF JANUARY 16, 1963

XP-100 PISTOL					
Retail Selling Price	\$75.00 *	\$85.00	\$95.00	100.00	\$105.00
Net Selling Price	40.37	45.74	51.13	53.82	56.51
Cost of Goods					
Full Factory	39.00	39.00	39.00	39.00	39.00
Selling & Adm.	3.84	4.35	4.86	5.11	5.37
Research	<u>1.21</u>	<u>1.37</u>	<u>1.53</u>	<u>1.62</u>	<u>1.70</u>
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	<u>308 30-30</u> 222		<u>308 30-30</u> 222		<u>308 30-30</u> 222	<u>308 30-30</u> 222		
Cost of Goods								
Full Factory	\$39.70	\$42.40	\$39.70	\$42.40	\$39.70	\$42.40	\$39.70	\$42.40
Selling & Adm.	4.35	4.35	4.86	4.86	5.37	5.37	5.88	5.88
Research	<u>1.37</u>	<u>1.37</u>	<u>1.53</u>	<u>1.53</u>	<u>1.70</u>	<u>1.70</u>	<u>1.86</u>	<u>1.86</u>
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%

* Retail selling price used in Project.

NO. 2
 REMINGTON-UMC CO.

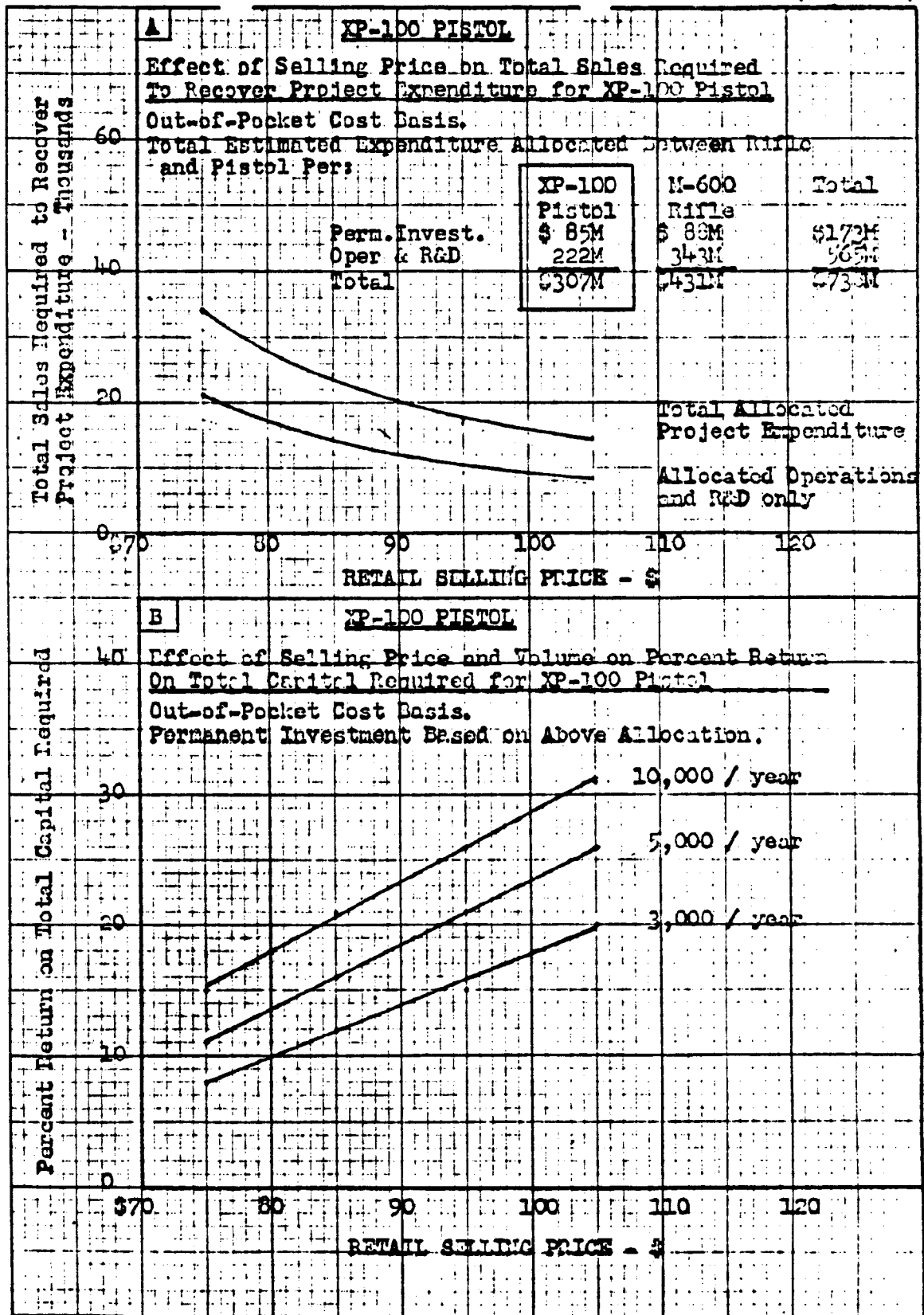


Figure . .

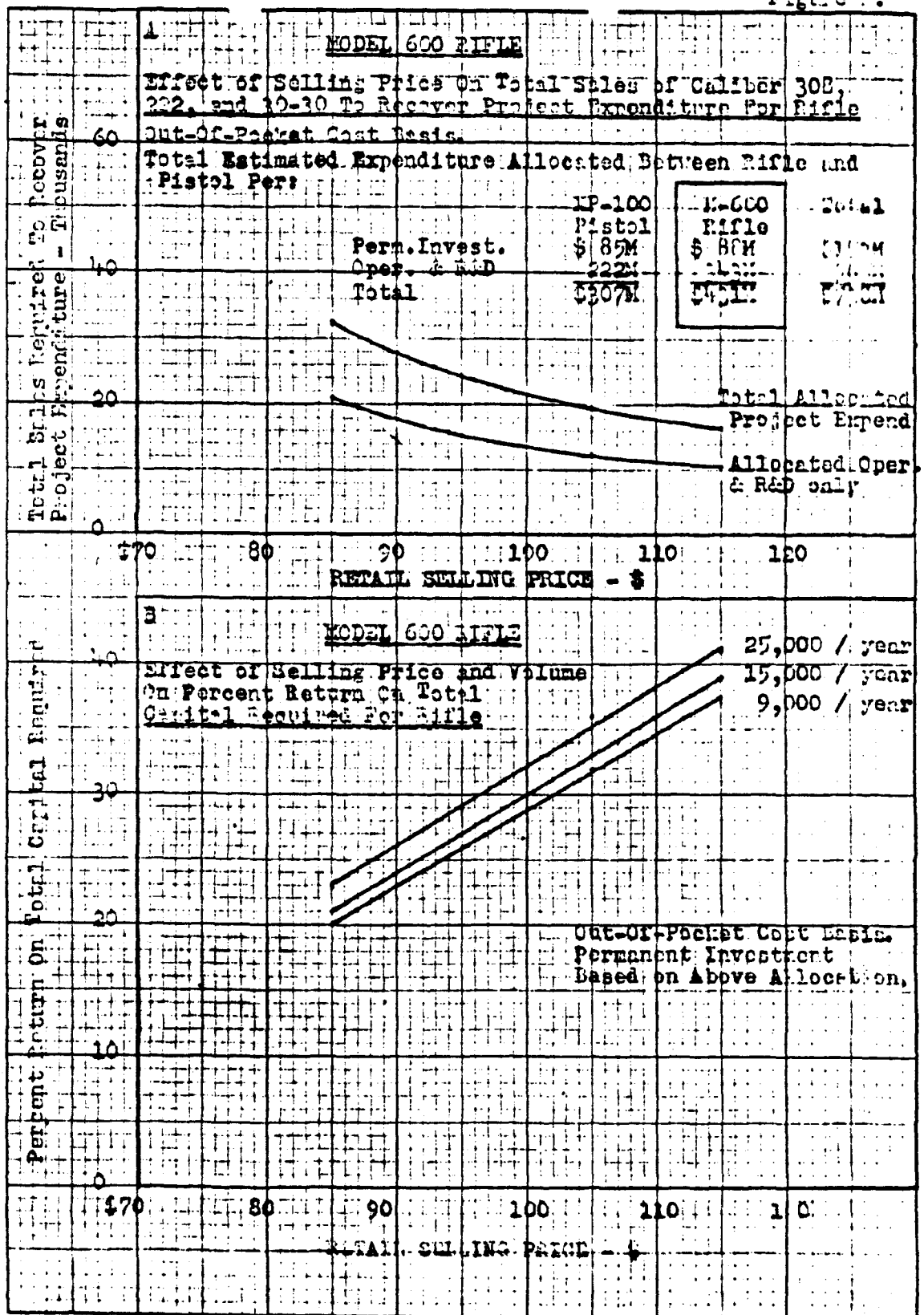
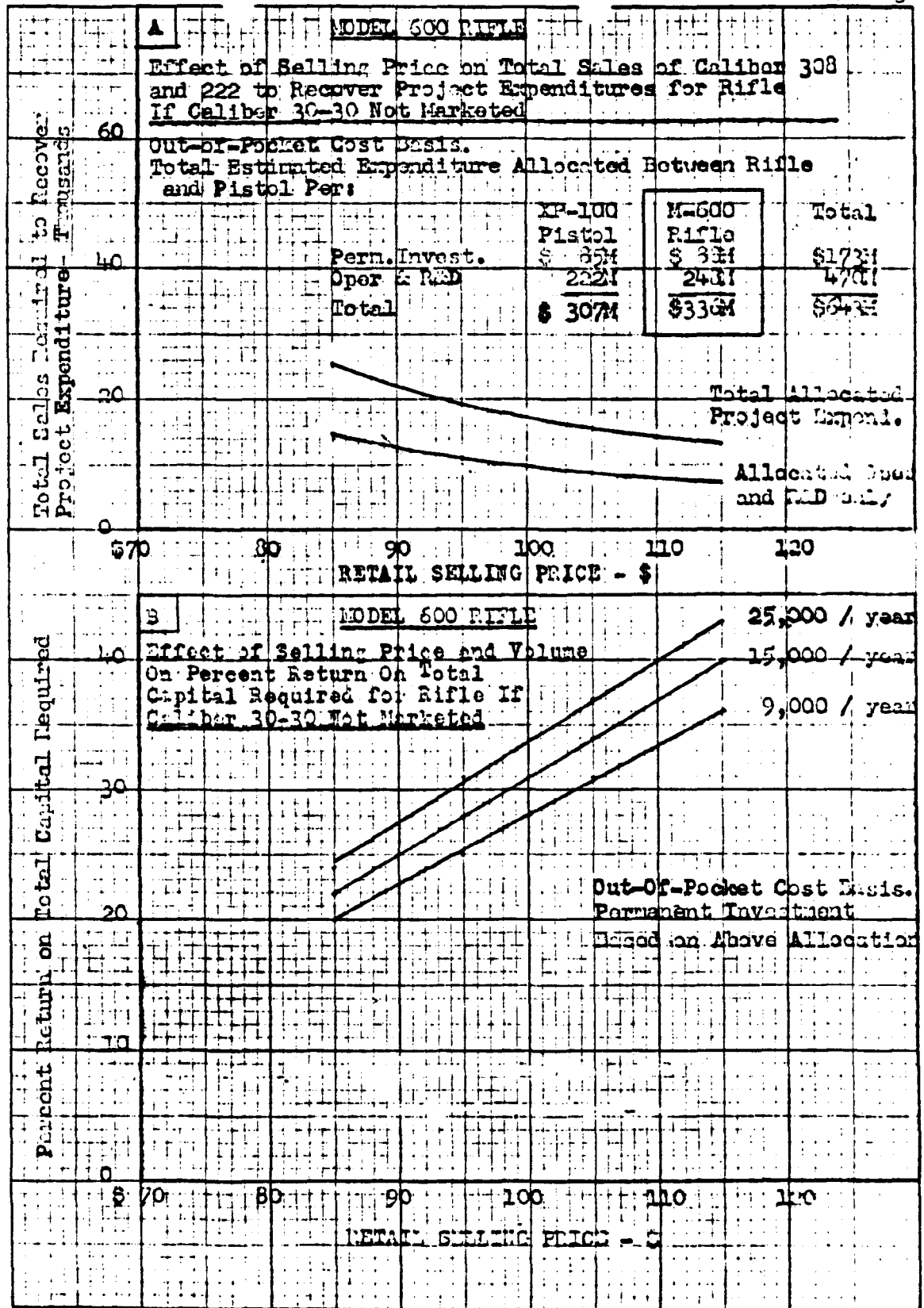
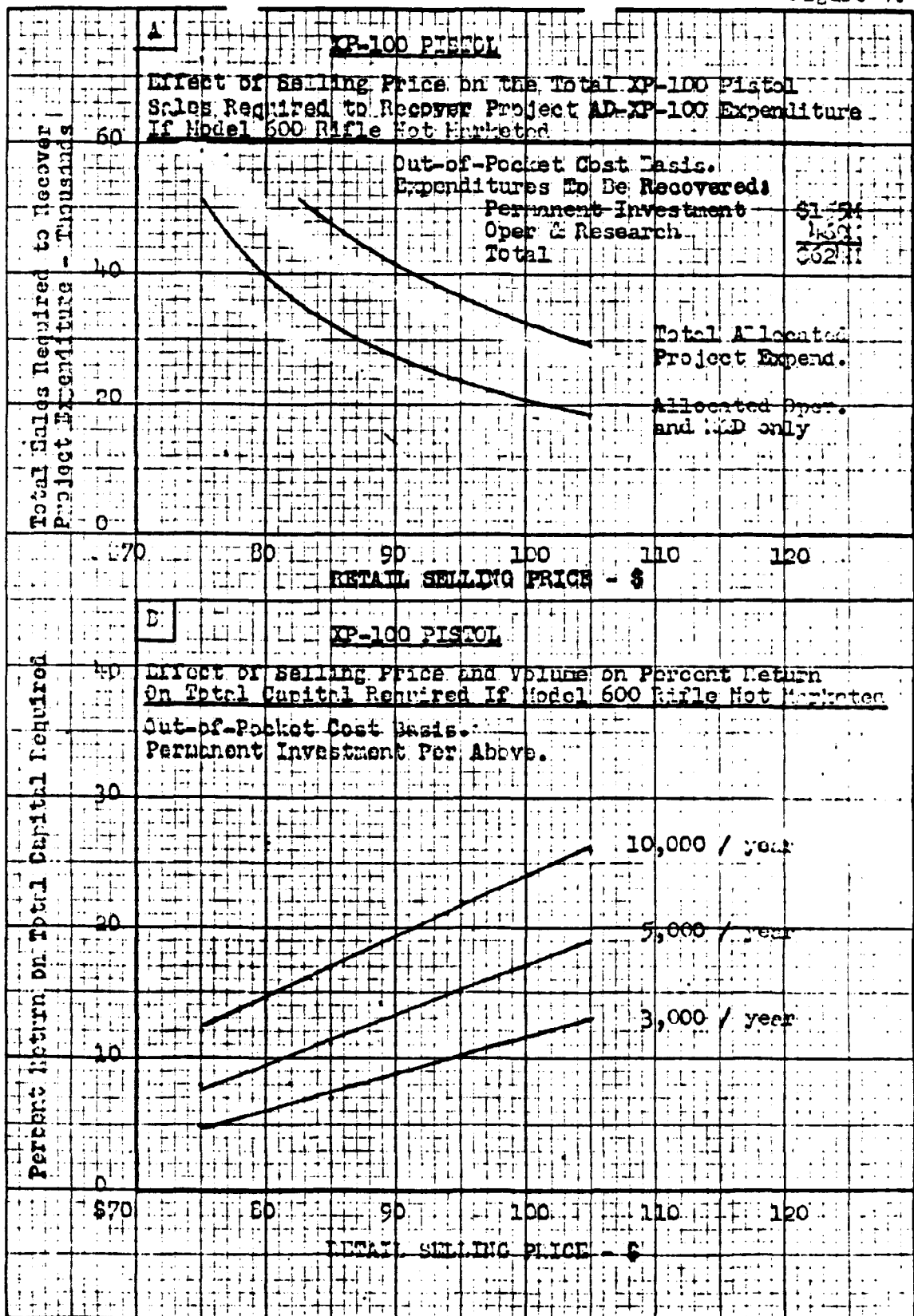


Figure 3.



KINZEL & KINZEL CO. CHICAGO, ILL.

Figure 4.



LIMITED DISTRIBUTION

CC: J. E. Dickey, Jr. - Bupt.
F. E. Morgan
S. M. Alvis
D. E. Miller
File

Ilion, New York
February 20, 1961

E. H. Bleckwell
Gail Evans
H. K. Faulkner
H. M. Stoessel
G. M. Calhoun

XP-100 PISTOL & MODEL 600 RIFLE - SELLING PRICE

Information on pricing the XP-100 Pistol and Model 600 Rifle was reviewed at the February 12 Operations Committee. The review was based on the Plant's letter to Gail Evans of January 25 concerning this subject. The following memorandum summarizes the pricing recommendations of the Committee.

Status Prior to Meeting

The status of the rifle and pistol prior to the February 12 meeting was:

	<u>Model 600 Rifle</u>	<u>XP-100 Pistol</u>
Retail Selling Price	Not established (Project Basis - \$85)	Not established (Project Basis - \$75)
Planned Calibers	222, 308 & 30-30	221 Remington
Stock	Wood - Monte Carlo Shape (No checkering, grip cap, fore end tip, swivels or sling)	Nylon

Pricing Recommendations

Model 600 Rifle

The Sales Department suggests the rifle can be successfully marketed at \$100 retail by adding Custom Checkering and changing the planned calibers from 222 and 30-30 to the new calibers 284 Winchester and 350 Remington Magnum, retaining the 308. They estimate the long term sales volume will be fifteen thousand (15,000) a year. The basis for their recommendations are:

- The retail price of the rifle must be increased above the \$85 used in the project. Earnings at this price are inadequate, being about break-even for the 308 and 222 calibers and a \$2.38 loss for the 30-30 caliber, on a full book cost basis. The earnings are poorer than originally projected due to lower estimated total plant volume, higher manufacturing cost for the 30-30 caliber and other small production cost increases.

- Since the price must be increased, the rifle will no longer compete price for price with the Winchester Model 94 and must compete with higher priced rifles. Consequently, features such as 30-30 Winchester to compete directly with the Winchester 94 may be dropped and other competitive features added for the higher price class.

Sales proposes the competitive features be improved by adding Custom Checkering to the sides of the grip and fore end. This provides significantly more appeal at small increased cost.

They also propose to substitute two new cartridge calibers, 284 Winchester and 350 Remington Magnum for the previously planned 222 Remington and 30-30 Winchester. Experience indicates a short barrel 222 Caliber rifle has no appeal. The 30-30 is obsoleted by cartridges with better ballistics. It is also hampered by additional project cost for design and tooling and by higher production cost than the rimless calibers. The additional project cost for 30-30 caliber has been estimated at \$110,000 of which only \$15,000 has been spent. Abandoning this caliber now will reduce project expenditures \$95,000.

- The Model 600 rifle with its proposed features and \$100 price should not materially affect Model 700 rifle sales. If it does, however, the cash operative earnings of approximately \$25 compares favorably with the \$27.40 cash operative earnings of the Model 700 ADL.

The Production, Research, and Treasurer's Departments agree with Sales' recommendations as proposed.

Table 1 attached summarizes the economics of the rifle as now proposed. The table also shows for comparison the economics of selling the originally planned calibers of 222 Remington, 308 Winchester and 30-30 Winchester at \$100 retail.

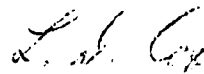
XP-100 Pistol

The retail selling price of the pistol must also be raised over the \$75 used in the project because of an estimated \$3.68 full book loss at this price. The earnings are poorer than originally projected due to lower estimated total plant volume, the higher cost of the pistol packing case, and other small increased manufacturing costs. The simulated leather pistol case adds about \$3.55 full book packaging cost.

The Sales Department feels the pistol can be marketed for \$95 retail and support a long term volume of 5000 a year. They feel the pistol must be priced below the rifle to maintain our marketing integrity. A visual comparison of the rifle and the pistol indicates to the Sales Department that the pistol should sell for a lower price.

The other departments question if the pistol cannot retail for \$100. They suggest the pistol will appeal to a limited market whose size will be unaffected by small differences in price. They also point out the full book manufacturing cost of the pistol at \$100 is only \$1 less than the rifle, and does not justify a \$5 lower retail (\$2.00 net selling) price.

The pistol price was left unresolved and will be determined by further discussion of the Committee at Bridgeport. Table 2 attached summarizes the economics of selling the pistol for \$95 and for \$100.



L. D. Cox

LDC:I
Attachments

MODEL 600 RIFLE

OPERATIVE EARNINGS AND RETURN ON INVESTMENT
AT PROPOSED \$100 RETAIL SELLING PRICE

Costs Include Custom Checkering

	<u>At The Selling Price & With The Calibers Unanimously Proposed By All Departments</u>	<u>At The Selling Price Unanimously Proposed By All Departments & With The Original Calibers For Which The Rifle Was To Be Designed</u>		
Retail Selling Price	\$100.00	\$100.00		
Net Selling Price	53.82	53.82		
Calibers	Rimless Only 284 Win.* 308 Win. 350 Rem. Mag.*	Rimless 222 Rem. 308 Rem.	Rimmed 30-30	Total 222 Rem. 30-30 Win. 308 Win.
Estimated Third Year Volume	15,000	9,000	6,000	15,000
<u>FULL BOOK COST DATA</u>				
Unit Cost of Goods	\$ 46.73	\$46.73	\$49.43	\$47.82
Unit Operative Earnings	7.09	7.09	4.39	6.00
% of Net Selling	13%	13%	8%	11%
<u>OUT OF POCKET COST DATA</u>				
Unit Cost of Goods	\$ 28.60	\$28.60	\$30.10	\$29.20
Unit Operative Earnings	25.22	25.22	23.72	24.62
Total Operative Earnings	\$378 M	\$227 M	\$142 M	\$369 M
Net Earning After Franchise Tax, All Other Expense, and Federal Tax	164 M	98 M	61 M	159 M
Investment				
Permanent Investment	\$ 88 M	\$ 88 M	—	\$ 88 M
Working Capital	433 M	261 M	179 M	440 M
Total Capital Required	\$521 M	\$349 M	\$179 M	\$528 M
% Return on Total Capital	31%	28%	34%	30%

* Costs and earnings for calibers assumed the same as the prototype models displayed, with the addition of Custom Checkering. Any need for stainless steel Barrel or Recoil Pad would presumably have added cost offset by increased selling price.

TABLE 2.XP-100 PISTOLOPERATIVE EARNINGS AND RETURN ON INVESTMENT
AT \$95 AND \$100 RETAIL SELLING PRICE

Retail Selling Price	\$ 95.00	\$100.00
Net Selling Price	51.43	53.82
Calibers	221 Rem.	221 Rem.
Estimated Third Year Volume	5000	5000

FULL BOOK COST DATA

Unit Cost of Goods	\$ 45.39	\$ 45.73
Unit Operative Earnings	5.74	8.09
% of Net Selling	11%	15%

OUT OF POCKET COST DATA

Unit Cost of Goods	\$ 29.10	\$ 29.10
Unit Operative Earnings	22.03	24.72
Total Operative Earnings	\$110.15	\$123.60
Net Earnings After Franchise Tax, All Other Expense and Federal Tax.	\$ 48.11	\$ 54.11
Investment		
Permanent Investment	\$ 85.11	\$ 85.11
Working Capital	144.11	146.11
Total Capital Required	\$229.22	\$231.22
% Return on Total Capital	21%	23%

LIMITED DISTRIBUTION

cc: Gail Evans
F. E. Morgan
N. F. Larsen
D. E. Miller
A. J. Seckner-J. J. Phillips
A. J. Brown-A. D. Kerr
File

Ilion, New York
March 19, 1963

TO: R. L. HALL
FROM: L. D. COX *L. Cox*
SUBJECT: PROJECT AD XP-700-3
FIRST AND THIRD YEAR VOLUME

The confirms the first and third year volumes to be used for the Part 3 of the subject project. The volumes were obtained from N. F. Larsen through his discussions with Sales.

The table attached shows the project volumes. The first year will be that indicated by #2-1963 Sales Forecast. The third year will be practically the same used on the Part 3 of the Model 1100 Project. The exceptions are:

1. Total Plant Volume will be 361,115 instead of 359,115.
2. The XP-100 Pistol Volume will be 5,000 instead of 3,000.
3. The combination 5,000 Model 742's and 40,000 XC-6 will be combined as 45,000 Model 742's.
4. The 30,000 XR-5 Rolling Block will be revised to 30,000 Model 514's and no Rolling Block.
5. The Model 600 will be available beginning in 1964 in caliber 222, 308, and 35 Remington.

LDC:ms
ATTACH.

LIMITED DISTRIBUTION
PROJECT AD KP 700-3
ESTIMATED 1963 AND 1965 TOTAL PLANT VOLUME

<u>MODELS</u>	<u>1963</u>	<u>1965</u>
<u>Shotguns</u>		
1100* - 12 Gauge		40,000
- 16 & 20 Gauge		20,000
11-48		10,000
Sportsman 58 **	(1)	- (2)
878	(1)	- (2)
870		<u>40,000</u>
Total Shotguns		110,000
 <u>Center Fire Rifles</u>		
40X - B CF		200
700		20,000
XP-100 Pistol		5,000
600 ***		15,000
742		45,000
760		<u>15,750</u>
Total C.F. Rifles		100,950
 <u>Rim Fire Rifles</u>		
40X-B		620
513		1,120
514		30,000
521		925
550		10,000
552		12,000
572		9,000
N-10		7,000
N-11		12,500
N-12		15,500
N-66		36,500
N-76		<u>15,000</u>
Total Rim Fire Rifles		150,165
GRAND TOTAL		361,115

#2-1963 Sales Forecast

- (1) Only 1963 models affected by Model 1100. Their volume if continued without Model 1100; Sportsman 58 - 20,000; Model 878 - 5,000.
- (2) Only 1965 models affected by Model 1100. Their volume if continued without Model 1100; Sportsman 58 - 17,000; Model 878 - 4,000.
- * Model 1100 - 80% Plain barrels, 20% Vent Ribs.
- ** 16 and 20 Gauge production only. in 1963.
- *** To be introduced in 1964 in caliber 308, 222, and .35.

MINUTE #4-1963

FROM PAGE NUMBER

MAJOR SUBJECT

SUB SUBJECT

³
36 P-101 B. A. Pistol

XP-100 BOLT ACTION PISTOL
MODEL 600 BOLT ACTION RIFLE

Production Status

Production reported 800 pistols have been warehoused with a February schedule of 30 a day and a March schedule of 50 a day. They will be able to meet shipments when the pistol is announced March 1. The assembly is now converted to 12" twist barrels. Measures are being taken to improve the shipping adequacy of the pistol package.

Trial and pilot is in progress on the rifle to be completed by April 15. Only a pilot quantity of parts have been committed.

Selling Price

The Committee reviewed information on pricing the pistol and rifle. The Secretary was instructed to summarize the discussion in a letter

to the Committee for their final decision on selling prices before the pistol is announced March 1. Two related decisions that were reached are:

- Research should prepare designs of Custom Checkering patterns for the sides of the grip section and fore-end of the Model 600 stock.
- The use of the Model 700 ADL stock on the Model 600 rifle should be reviewed to determine if a higher volume of it as a common part would lower its cost below the Model 600 stock.

MINUTE #7-1963

FROM PAGE NUMBER *2*

MAJOR SUBJECT

Xp-100 Bolt Action Pistol

SUB SUBJECT

XP-100 BOLT ACTION PISTOL

Production Status

The pistol was announced March 6 and will retail for \$99.95. Production reported approximately 1600 pistols have been warehoused and that its manufacture is running smoothly. This item will be dropped.

MINUTE #12-1963

FROM PAGE NUMBER

4

MAJOR SUBJECT

Xp-100 R.A. Pistol

SUB SUBJECT

XP-100 BOLT ACTION PISTOL

Research and Production reviewed that no information has been received indicating the simulated leather pistol case is producing a measurable marketing advantage. They reviewed the current high price and single supplier situation, and proposed to review with the Sales Department alternative packaging that may improve either or both of these situations.

MINUTE #12-1963

FROM PAGE NUMBER 5

MAJOR SUBJECT *XP-100 A Autoloading Pistol*

SUB SUBJECT

XP-100 A AUTOLOADING PISTOL

Research effort to date has produced a satisfactorily functioning semi-automatic pistol. However, weight is excessive and changes are being made to correct this.

MINUTE #15-1963

FROM PAGE NUMBER 7

MAJOR SUBJECT

Rim Fire Rifle Sights

SUB SUBJECT

RIM FIRE RIFLE SIGHTS

Research stated that the present Patridge-type sight on the Nylon line was designed in response to Trade requests as the best means of eliminating elevation and canting errors. They reviewed the new sights on the XP-100 pistol and Model 600 rifle that are intended for low cost volume production and could be used across the rim fire and low cost center fire line.

The Chairman asked the Sales Department to establish the sight specifications they feel are needed, and to recommend, with Research, a course of action to the Committee.

MINUTE #15-1963

FROM PAGE NUMBER

MAJOR SUBJECT

SUB SUBJECT

*7
Caliber 6 mm Remington*

CALIBER 6MM REMINGTON

Function testing of .243 Winchester (equivalent to 6MM) in Model 742 rifles has been satisfactory. Only acceptable accuracy is needed to announce this caliber in the Models 742, 760 and 700.

Research reported preliminary tests at Bridgeport indicate an 8" twist provides satisfactory accuracy for bullet weights between 75 and 110 grains. The accuracy of heavier 105 and 110 grain bullets with a 10" twist is not acceptable. Ilion Research is making a quantity of 8" twist barrels to confirm Bridgeport's results.

Sales questioned the integrity of classing the 6MM as a Magnum. Research agreed and Sales stated that the designation will be 6MM Remington.

MINUTE #15-1963

FROM PAGE NUMBER 7

MAJOR SUBJECT

Rim Fire Rifle Sights

SUB SUBJECT

RIM FIRE RIFLE SIGHTS

Research stated that the present Patridge-type sight on the Nylon line was designed in response to Trade requests as the best means of eliminating elevation and canting errors. They reviewed the new sights on the XP-100 pistol and Model 600 rifle that are intended for low cost volume production and could be used across the rim fire and low cost center fire line.

The Chairman asked the Sales Department to establish the sight specifications they feel are needed, and to recommend, with Research, a course of action to the Committee.

MINUTE #21-1963

(November, 1963)

FROM PAGE NUMBER

3

MAJOR SUBJECT

Model X P. 100 Long Range Pistol

SUB SUBJECT

MODEL XP-100 LONG RANGE PISTOL

The Chairman requested from Sales the current order position of this year and the firmness of the anticipated 1964 sales volume for the Model XP-100. Sales estimated that somewhat more than six thousand would be sold this year. The proposed Sales forecast approved by General Management indicates a four thousand sales volume for 1964. This volume is subject to change in the #1 Forecast dependent upon estimates from the field.

Aluminum Receiver

CENTER FIRE RIFLESMODEL 600 BOLT ACTION CARBINE

Production stated all three calibers are being warehoused and production is meeting shipping requirements. Costs were not reported since only December costs were available at the time of the meeting and December production was too small for the cost data to be significant.

Sales reviewed the 1964 forecast. The current forecast is 15,000 rifles. However, trade reaction will be more accurately known in the next two months and this could conceivably increase the forecast 5,000 to 10,000 rifles. Production stated they can produce for a higher forecast. Their maximum capability is limited by the common equipment on which parts for the Models 700, 600 and XP 100 are produced.

MINUTE #3 - 1965

February

FROM PAGE NUMBER

3 & 4

SUBJECT

XP-100

CENTER FIRE RIFLES

MODEL 600 BOLT ACTION CENTER FIRE RIFLE

Costs

Production reviewed the fourth quarter and 1964 average costs which are attached as Table 4. The average total factory cost was \$.55 under the first year project figure.

Also shown as Table 5 is the breakeven chart. The XP-100 Pistol shipments have been less than the project forecast. Model 600 Rifle shipments have exceeded the forecast. On a cash basis, the breakeven to realize the project expenditures was 31,000 guns. At the end of 1964, accumulated shipments were 31,914.

Committee Action

Costs will be reviewed in 1965 on a six months basis. Performance as related to the project figures will be reviewed when total 1965 data is available.

TABLE 4

MODEL 600 COSTS

PROJECT ESTIMATE VERSUS ACTUAL

	PROJECT		1964 ACTUAL			
	3rd YEAR (1966)	1st YEAR (1964)	LATEST THREE MONTHS OCT. NOV. DEC.			AVERAGE FOR 1964
MATERIAL						
- STANDARD	\$ 7.29	\$ 7.29	\$ 7.36	\$ 7.03	\$ 7.03	\$ 7.30
- VARIANCE	.18	.18	.63	.99	.72	.62
TOTAL MATERIAL	\$ 7.47	\$ 7.47	\$ 7.99	\$ 8.02	\$ 7.75	\$ 7.92
LABOR						
- STANDARD	\$ 5.88	\$ 5.88	\$ 6.43	\$ 6.17	\$ 6.17	\$ 6.38
- VARIANCE	1.98	2.27	2.28	2.18	2.10	2.23
TOTAL LABOR	\$ 7.86	\$ 8.15	\$ 8.71	\$ 8.35	\$ 8.27	\$ 8.61
DIRECT EXPENSE	\$ 6.31	\$ 6.81	\$ 8.11	\$ 5.60	\$ 5.64	\$ 6.91
INDUSTRIAL REL.	2.59	2.69	2.03	2.86	2.27	2.70
ALLOCATED EXPENSE	2.95	3.40	3.10	2.76	3.61	3.14
ENGINEERING	\$.78	\$ 1.45	\$ 1.68	\$ 2.79	\$ 2.35	\$ 1.67
WARRANTY REPAIRS	.52	.25	.18	.34	.16	.13
MFG. BURDEN	\$ 2.59	\$ 2.90	\$ 1.53	\$ 3.09	\$ 2.50	\$ 2.12
PLANT OVERHEAD	7.46	8.28	7.17	7.51	7.16	7.63
INVENTORY ADJ.	.19	.41	.41	.41	.40	.43
TOTAL FACTORY COST	\$38.72	\$41.81	\$40.91	\$41.73	\$40.11	\$41.26
OVER OR (UNDER) 1ST YEAR PROJECT ESTIMATE		0	(\$.90)	(\$.08)	(\$1.70)	(\$.55)

TABLE 5

MODEL XP-100 PISTOL AND MODEL 600 CENTER FIRE RIFLES

BREAKEVEN POINTS

1. EXPENDITURES (TOTAL IS ACTUAL - SPLIT IS ESTIMATED)

	<u>CAPITAL</u>	<u>DEVELOPMENT & CHGS. TO OPERS.</u>	<u>TOTAL</u>
Model XP-100	\$ 85M	\$221M	\$306M
Model 600	<u>88M</u>	<u>320M</u>	<u>408M</u>
Total	\$173M	\$541M	\$714M

2. BREAKEVEN - TOTAL EXPENDITURES

Model XP-100 - \$306M ÷ \$22 Average = 14,000 Guns

Model 600 - \$408M ÷ \$24 Average = 17,000 Guns

Total 31,000 Guns

3. PROJECT FORECAST

	<u>XP-100</u>	<u>Model 600</u>	<u>Total</u>
First Year	5,000	12,000	17,000 Guns
Third Year	3,000	15,000	18,000 Guns

4. ACTUAL SHIPMENTS

	<u>XP-100</u>		<u>Model 600</u>		<u>Total</u>	
	<u>Year</u>	<u>Accum.</u>	<u>Year</u>	<u>Accum.</u>	<u>Year</u>	<u>Accum.</u>
1963	5,577		-		5,577	
1964	958	6,535	25,379	25,379	26,337	31,914

SHOTGUNS - contd.

CENTER FIRE RIFLES

MODEL 600 BOLT ACTION CENTER FIRE RIFLE

Costs

The attached Table 4 shows the comparison of the first and third year project cost forecast, average for the first six months of 1965 and the average for 1964. The 1965 costs are the first year forecast. Volume has been an important factor in the favorable cost results.

Attached as Table 5 is the break-even chart for the Models XP-100 Pistol and 600 Center Fire Rifle.

Committee Action

The cost comparison will again be reviewed when the total 1965 figures are available. The break-even chart review will be dropped.

TABLE 5

MODEL XP-100 PISTOL AND MODEL 600 CENTER FIRE RIFLES

BREAKEVEN POINTS

1. EXPENDITURES (TOTAL IS ACTUAL - SPLIT IS ESTIMATED)

	<u>CAPITAL</u>	<u>DEVELOPMENT & CHGS. TO OPERS.</u>	<u>TOTAL</u>
Model XP-100	\$ 85M	\$221M	\$306M
Model 600	<u>88M</u>	<u>320M</u>	<u>408M</u>
Total	\$173M	\$541M	\$714M

2. BREAKEVEN - TOTAL EXPENDITURES

Model XP-100 - \$306M ÷ \$22 Average = 14,000 Guns

Model 600 - \$408M ÷ \$24 Average = 17,000 Guns

Total 31,000 Guns

3. PROJECT FORECAST

	<u>XP-100</u>	<u>Model 600</u>	<u>Total</u>
First Year	5,000	12,000	17,000 Guns
Third Year	3,000	15,000	18,000 Guns

4. ACTUAL SHIPMENTS

	<u>XP-100</u>		<u>Model 600</u>		<u>Total</u>	
	<u>Year</u>	<u>Accum.</u>	<u>Year</u>	<u>Accum.</u>	<u>Year</u>	<u>Accum.</u>
1963	5,577		-		5,577	
1964	958	6,535	25,379	25,379	26,337	31,914

MINUTE #17 - 1971

OCTOBER 14, 1971

FROM PAGE NUMBER

8 & 9

SUBJECT

ARMS SPECIFICATIONS

Model 1100, 12-20 Ga. Left Hand

Model 870 Left Hand

Model 870

Model 1100

Model 788

Model 700

Model 700 Left Hand

XP-100

ARMS SPECIFICATIONS

Marketing made the following report on arms specifications:

Shotguns

Model 1100, 12-20 gauge left hand shotguns will be introduced with Vent Rib specifications only. In 1972, all plain Barrel specifications will be dropped on Model 870 left hand shotguns.

At a future date to be established, 16 gauge Vent Rib specifications will be dropped in Model 870 and 1100 shotguns.

At a future date to be established, all 20 gauge regular specifications in Model 870-1100 shotguns will be dropped. This probably will be done when the 20 gauge lightweight gun cost is reduced by press forming these Stocks.

Center Fire Rifles

The Model 788, 30-30 caliber is to be out of production in 1971 but remain in the 1972 catalog. The Model 700, 350 Rem. Mag. and

6.5 Rem. Mag. will be out of production in 1971 but will be in the 1972 catalog. Model 700 left hand rifle is being introduced in BDL grade, calibers 270, 30-06 and 7mm mag.

Marketing would consider dropping the XP-100 long range pistol. The economics are to be reviewed.

SHOTGUNS - contd.MODEL 1100 WEIGHTED LT-20, 28, & .410 GAUGE

Research reported that guns are in test. Patterns have been taken and field cycle testing will start this week. One gun of each gauge will be endurance tested to 25,000 rounds.

Production reported that engineering estimates are being prepared and economics should be available for the April meeting.

MODEL 870 - 1100; LT-20 GAUGE
SUPER SLUG GUN

Research reported that preliminary design work has been started. Twelve (12) LT-20 Special Slug Barrels, with 3" chambers, are being built. Contacts will be made to scope manufacturers for long eye relief scopes, so that a design can be made for the Rear Sight attachment. This is being reviewed both ways - one being with rifle sights, such as currently done; the other is with a special Vent Rib, which will hold a Rear Sight, Front Sight, and Scope Mount.

The Chief Engineer asked why a sight with long eye relief was being considered. Research responded that it was primarily a matter of accuracy. This Scope would be mounted on the Barrel, which is intrinsically more accurate than the conventional method of mounting on the Receiver.

In response to questions from the Chairman, Research stated that the eye relief would be approximately six (6) inches, and the design would not preclude a shooter putting a sight on the Receiver if he wished.

CENTER FIRE RIFLESMODELS XP-100, 600

Research reported that, on the Model XP-100, the ears on the top of the Trigger were removed to eliminate a possible interference with the Trigger Adjusting Screw. A change was also made to the Sear Safety Cam, to allow for increased clearance between the Bolt Stop Pin and the Sear. The Safety Cam was changed to give added lift.

CENTER FIRE RIFLES - contd.MODELS XP-100, 600 - contd.

All of these changes have been reviewed with the Product Safety Committee.

Research further reported that all of these changes were made only to facilitate the processing of the XP-100 through production. All guns, whether they have these latest changes or not, have passed all safety tests prior to shipment. Production reiterated that all guns have passed the safety tests, and that the changes were made only to assist in the production and assembly of the guns.

Production issued a report stating that there are 3,648 Model 600 Rifles, without Trigger Assemblies, in the warehouse. Five hundred (500) of these rifles are being fitted with Trigger Assemblies to fill an order for barreled Actions for Europe. These will be followed with the reassembly of additional rifles, five hundred (500) of which will be complete in April. Following this, the balance of disassembled guns will have Fire Controls replaced. Marketing will be notified when completed.

The production of Trigger Assemblies for the Model 600 is being curtailed to bring inventories in line with projected usage. Of the 22,088 Trigger Assemblies manufactured, 15,038 have been used in rifles returned to Ilion, or shipped to gunsmiths. There are 7,050 on hand ready for shipment. The daily demand is currently running between 100-200 Trigger Assemblies.

MODEL 700 - 7mm EXP. REM.

Production reported that marking rolls, for caliber designation, have been received, and Barrels are progressing through the line. Warehousing is anticipated for March.

Marketing reported that they have a special Model 700 sample with an ADL satin finished Stock, with selected BDL features, which will be shown to International. On this gun, the 7mm-06 Barrel marking has been obliterated, and the 280 Rem. marking added.

RIM FIRE RIFLESPISTOLSXP-100 - 7MM BR. REM.
(1980 Introduction)

Research reported that the powder metal Rear Escutcheon failed during endurance testing. This part has subsequently been redesigned to use a longer screw. Testing with the redesigned component has been satisfactory, and drawings have been transmitted.

Production reported that the 7MM BR REM. involves a major reprocessing effort. Involved is a completely new Barrel form and chamber, a new Bolt Stop, a new powder metal Front Sight Ramp, and significant revisions to the Stock and Stock molding dies.

The model drawing transmittal for the XP-100 was made in June. However, at that time, Production was starting the machine tryouts for the 7400 project, and were working on the other products due for 1980 introduction. As a result, tool design was delayed. Tool design and build is now in progress, and Production is projecting that trial and pilot guns can be complete, ready for design verification testing, in March.

CENTER FIRE RIFLESMODEL 700 BOLT LOCK - Contd.

The Chairman commented that, because of the purpose of this change, it is important to emphasize this item. Research felt that they could have a prototype available in May.

MODEL 700 FIRE CONTROL IMPROVEMENTS
(1982 Introduction)

Research reported that the two Fire Control designs have been assembled. The design with a Sear Block Safety is complete and ready for testing. The design with a Sear and Trigger Block Safety is still in the revision stage. All components necessary for the second model have been made except for the Safety arm. Scheduled assembly is mid-March.

BOLT ACTION CARBINE
(1982 Introduction)

Research reported that Actions in all five calibers have been assembled and will be ready for testing by the end of February.

Production reported that engineering estimates are being prepared based on preliminary drawings supplied by Research. Production expects to have high-spot costs available for review with Research in April.

PISTOLSXP-100 - 7MM BR REM. CALIBER
(1980 Introduction)

Production reported that due to the favorable customer reception to this model, they have amended the trial and pilot procedures, and are processing a larger than normal quantity of components, which are expected to be ready in March (Exhibit 6).

Barrel Blanks have been started. Tooling is available to process these blanks through cut-off and crown, which is about half way through the sequence of operations. Production is closely monitoring tool deliveries, and are expediting where possible. The goal is to have Barrel Assemblies complete in early March.

Sample Front Sight Ramps have been completed. Required revisions to the powder metal coining tools have been accomplished, and a production run of Ramps is scheduled for the first week of March.

FIREARMS BUSINESS MEETING
MINUTE #5 - 1980
March 12, 1980

FILE: MODEL 1100 LT-20
 XP-100 BR REM.
 MODEL 870 COMPETITION
 MODEL 700 VARMINT
 MODEL 788

RECEPTION TO NEW PRODUCTS - 1980

RECEPTION TO NEW PRODUCTS ,

Distributor acceptance to new 1980 products has been very favorable. The original forecasts for the Model 1100 LT-20 Limited and XP-100 BR REM. were doubled and orders have surpassed the revised figures. Model 870 Competition and Model 700 Varmint Special 7MM-08 REM are over 90% of forecast. The restyled Model 788 is at 77.9% of forecast, which is considerably higher than total center fire orders versus forecast. Marketing expects to meet or exceed forecast on all new 1980 products.

MINUTE #9 April 16, 1980
FROM PAGE NUMBER 15
SUBJECT XP-100 - 7MM BR. REM.

PISTOLS

XP-100 - 7MM BR. REM
(1980 Introduction)

Research reported that Production sample pistols were received from Production and accuracy testing from the bench is in progress.

Production reported that a small quantity of XP-100 - 7MM BR REM pistols were assembled by Production during the last week of March. These were followed by production quantities in April from which Research selected their samples. Manufacturing of pistols is being held until Research completes their testing. Production quantities are expected in May.

Initial Gallery proof testing caused some concern. Barrel Brackets on all guns proofed in the Gallery were bent enough to affect Sear engagement. A modification to the fixture that holds the gun for proofing eliminated the problem.

Marketing reported that because the 7MM BR REM is not available as a factory loaded cartridge, an instruction sheet has been prepared describing case forming and loading procedure. It has been reviewed by Legal and is now being routed for approval. It will be included in the box with each XP-100.

MINUTE #10 - 1980 May 14, 1980
FROM PAGE NUMBER 7 & 8
SUBJECT MODEL XP-100 - 7MM BR REM

PISTOLS

MODEL XP-100 - 7MM BR REM
(1980 Introduction)

Research reported that trial and pilot for this gun has been successfully completed.

MODEL XP-100 - 7MM BR REM - Contd.

Production reported that the XP-100 - 7MM BR Rem is in production with four Front Sight holes. These guns will be put in the warehouse as soon as ammunition hand loading instructions are available.

A production sample gun was shown to the Committee.

Marketing reviewed the hand loading procedure to be included with this gun and showed a sample to the Committee.

The Chairman questioned whether Remington should be providing cartridge dimensions and detailed hand loading instructions. Pointing out that this is contrary to past practice, he suggested it be reviewed again with the Legal Department before releasing for invoice shipment.

MINUTE #13 - 1980

June 18, 1980

FROM PAGE NUMBER 14

SUBJECT XP-100 - 7 MM BR REM

XP-100 7 MM BR REM
(1980 Introduction)

The Chairman asked whether Marketing had received any indication of Field reaction to the new gun. Marketing responded that none has been received to date.

MINUTE #2 February 24, 1983
FROM PAGE NO. 12
SUBJECT: Model XP-100 7MM-08

MODEL XP-100 7MM-08

Research reported that a screening evaluation has been initiated to determine whether the XP-100 should be chambered in 7MM-08 caliber. They also reported that additional tests are being conducted. The Chairman asked that this proposal should be discussed at the April meeting.

MINUTE #4 - 1983

May 25, 1983

FROM PAGE NUMBER: 5

SUBJECT: MODEL XP-100 IN .223 REM AND
7MM-08 CALIBERS

Items:

- o Model XP-100 in .223 Rem. and 7mm-08 calibers
- o Model 7400 in .223 Rem. caliber
- o Model 788 long barrel

Comments: Above items have been withdrawn by Marketing in collaboration with Research and Production from 1984 introduction because of inadequate resources for implementation.

FIREARMS BUSINESS TEAM MEETING
August 1, 1985

PAGE: 4

FILE: XP-100 - .223 CALIBER

XP-100 - .223 CALIBER

- Process Engineering indicated that a trial and pilot test will be completed in mid-November.
- Marketing indicated that a mid-August decision was needed to include the XP-100 .223 in the consumer catalog.
- Process Engineering said they will try to expedite this matter.

Letter from J. W. Bower
in reference to
Business Team Meeting of 8/1/85

FILE: XP-100

NOTES FROM BUSINESS TEAM MEETING

Decisions made at yesterday's meeting that are of interest to you:

- o The 1986 offerings in the Sportsman 78 and XP-100 will be made in .223 caliber, not 5.56 mm. This is in response to SAAMI's recommendation that .223 and 5.56 be considered a dangerous combination.
- o The XP-100 will be introduced as soon as possible in 1986. Based on our previous conversation, I committed to a November 1 transmittal.
- o Marketing requested that the sight be removed from the XP-100.. Barrel drilled or tapped.

FIREARMS BUSINESS TEAM MEETING
October 10, 1985

PAGE: 3

FILE: XP-100, .223 REM

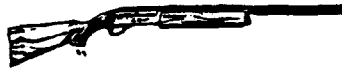
XP-100, .223 Rem.

The design transmittal is scheduled to be released by Research in early November. Trial and Pilot will be conducted in January 1986. Production will start in April.

At the request of the Business Team, Production will attempt to improve the April warehouse date.

1

Remington.



NEWS

Contact: Dick Dietz
302/774-5048

**REMINGTON "XP-100" VARMIN'T SPECIAL
CHAMBERED FOR 223 REM. CARTRIDGE**

In answer to frequent requests from small game handgun hunters, the Remington Arms Company has announced that its bolt action, single shot "XP-100" pistol will be chambered for the 223 Remington cartridge in 1986. It will be called the "XP-100" Varmint Special.

Design of the new "XP-100" Varmint Special is similar to that of the "XP-100" Silhouette, with a medium weight, 14-1/2-inch barrel and Remington's specially-contoured, one-piece stock of strong, Du Pont "Zytel" structural nylon.

Availability of a standard, small game rifle cartridge in a factory-produced pistol with an established reputation for exceptional accuracy should bring new levels of performance to the growing sport of long-range handgunning.

When it was introduced in 1963, the "XP-100" broke new ground in handgun design. It offered for the first time a bolt action handgun with the lock-up strength and rigidity previously found only in centerfire rifles. The action is similar to that of Remington's Model 700 bolt action rifle in which the cartridge is completely surrounded by three concentric rings of solid steel.

E.I. du Pont de Nemours & Co. (Inc.) • Marketing Communications Department • Wilmington, Delaware 19898

Shortly after the introduction of the "XP-100" pistol, a group of shooters, discovering its accuracy potential, began a new form of bench rest competition with it. Then, in 1980, Remington produced the "XP-100" Silhouette, chambered for the 7mm Remington BR cartridge and designed for Metallic Silhouette competition. In the opinion of many shooters, this remains the most accurate handgun-cartridge combination ever designed.

Because of its exceptional strength, the "XP-100" has been re-barreled or re-chambered for a variety of standard and wildcat cartridges in recent years. Now, as the "XP-100" Varmint Special in 223 Remington, it brings flat shooting, long range performance to small game hunters in a standard, factory-produced handgun.

The "XP-100" Varmint Special will be have a clean barrel without iron sights. But the receiver will be drilled and tapped for scope mounts to accommodate the shooter's choice of either standard rifle scopes or one of the new, extended eye relief pistol scopes.

"XP-100" Varmint Special pistols in 223 Remington will be available in mid-1986.

#

November, 1985

FIREARMS BUSINESS TEAM MEETING
January 10, 1986

PAGE: ADDENDUM - D. J. ANDERSON'S LETTER

FILE: XP-100

XP-100, .223 Rem.

A Trial & Pilot lot will be taken out of the first production run. Production is scheduled to start in April.

At the request of the Business Team, Production will attempt to improve the April warehouse date.

XP-100 LONG RANGE PISTOL - .223 REMINGTON
ESTIMATED EARNINGS AND NET RETURN ON INVESTMENT
FIRST YEAR OF OPERATION (1986)
DUPONT ECONOMIC EVALUATION METHODS
(DOLLARS AND QUANTITIES IN THOUSANDS)

	RESULTS FROM THIS PROJECT
SALES QUANTITIES	
SHOTGUNS	0
CENTER FIRE RIFLES	1
RIMFIRE RIFLES	0
TOTAL FIREARMS	1
EXTRA BARRELS	0
NET SALES	\$ 160
MANUFACTURING COST	\$ 104
DISTRIBUTION EXPENSE	3
SELLING EXPENSE	10
RESEARCH EXPENSE	8
ADMINISTRATION EXPENSE	5
TOTAL COST	\$ 130
PRETAX EARNINGS	\$ 30
PERCENT OF NET SALES	18.65%
NET EARNINGS	\$ 15
INVESTMENT	
PROJECT EXPENDITURES	\$ 0
EXISTING FACILITIES	0
ALLOCATED FACILITIES: MANUFACTURING	0
: SERVICE AND GENERAL	2
PERMANENT INVESTMENT	\$ 2
WORKING CAPITAL	\$ 102
TOTAL INVESTMENT	\$ 105
NET RETURN ON INVESTMENT	13.92%

Ilion, New York
May 19, 1986

REQUEST FOR APPROVAL TO RELEASE FOR
INVOICED SHIPMENT
XP-100 - .223 REM. CALIBER

New Product Approval Forms for the XP-100 in .223 Rem. Caliber
are attached. Please indicate your approval by signing and
dating the forms.

J. H. Chambers
Marketing Research & Business
Consultant-Firearms

JHC:hv
Attachments

NEW PRODUCT APPROVAL FORM

PRODUCT: XP-100 - .223 REM. CALIBER

SERIAL NO.: B7516944

DESCRIPTION: MODEL XP-100 "VARMINT SPECIAL" PISTOL CHAMBERED
FOR THE .223 REM. CALIBER.

NET SELLING PRICE \$ 228.39

ESTIMATED SALES VOLUME IN
YEAR OF INTRODUCTION 700

NET INCREASE IN SALES VOLUME
IN YEAR OF INTRODUCTION 700

ECONOMICS ARE ATTACHED.

INTRODUCTION IN MID-YEAR 1986

NEW PRODUCT APPROVAL FORM

PRODUCT: XP-100 - .223 REM. CALIBER

SERIAL NO.: B7516944

DATE

K. W. Soucy
K. W. Soucy, Superintendent
Product Eng'g. & Control/
Industrial Eng'g.

5-19-86

H. K. Boyle
H. K. Boyle
Plant Manager, Ilion

5/20/86

W. H. Coleman, II
W. H. Coleman, II
Laboratory Director

5/19/86

E. O. Fini
E. O. Fini, Chairman
Firearms Business Team

5/28/86

FIREARMS PRODUCT MEETING
October 29, 1986

SUBJECT: XP-100
STOCKS

SPECIAL FIREARMS EDITIONS

- XP-100 Laminated Stock - T. J. McCormack and D. J. Anderson have obtained a vendor to provide wooden laminated stocks for the production grade XP-100. The unit cost of the stocks is approximately \$70 in quantities of 1,000. The committee agreed to pursue this product as we feel a wooden stock version of this gun would far outsell our current nylon version even for an additional \$100 per gun. Tim will follow by obtaining finished samples for committee review.

FIREARMS PRODUCT TEAM MEETING
January 21, 1987

SUBJECT: XP-100, 35 REM
(1987 Product Introduction)

- XP-100 35 Rem

Process Records complete, structuring will be complete
week of Jan 22. Mike Kantor will report production
schedule at the February meeting.

FIREARMS PRODUCT TEAM MEETING
February 17, 1987

SUBJECT: XP-100, 35 REM
(1987 Product Introduction)

- XP-100 35 Rem

Mike Kantor reported these guns would be manufactured
in the May through September schedules.

FIREARMS PRODUCT TEAM MEETING
March 23, 1987

SUBJECT: XP-100, 35 REM
(1987 Product Introduction)

- XP100 - 35 Remington
Production will be spread from May through September.