

FIREARMS RESEARCH DIVISION

CATEGORY I

Origination Date August 1, 1980

Update(s) \_\_\_\_\_

Project Title: C.F. Fire Control Improvement Program

Project No.: C-2050

Objective: Design a new fire control for our bolt action guns having special features such as, push safety on or off in fired or unfired condition. Also separate bolt lock.

Commitment: Design to retrofit in existing bolt action firearm and be able to add to all new bolt actions for future design - combine, etc.

Personnel Assigned:

Martin

Design Personnel (1.2) Man years

Test Personnel (.3) Man years

Budget: Operating Expenses 1981 \$ 200M (including testing)  
Research Capital Project/Expenses \$ 0

Uncertainties:

- Can this be done and still have manufacturing tolerances we can live with in production?
- Will there be too many components that will have to be adjusted?

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<u>Program Steps and Timing</u>	<u>Responsibility</u>	<u>Completion Date</u>
1. Marketing to review prototype models.	Martin	Oct. '80
2. Fabricate five (5) models for testing and test for design verification.	Martin	Oct. '80
3. Fabricate five (5) models for product acceptance.	Martin	Jan. '81
4. Test for acceptance.	Martin	Feb. '81
5. Transmit drawings to P.E. & C.	Martin	Mar. '81
6. Trial and Pilot	Martin	June '82
7. Audit testing.	Martin	July '82
8. Warehouse	Martin	Nov. '82
9. Announcement	Martin	Dec. '82
10. Design follow-up and assist P.E. & C. and production.	Martin	As required

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CATEGORY II

Origination Date Aug. 1, 1980

Update(s) \_\_\_\_\_

Project Title: Product Improvement Programs

Project No.: B-2000; C-1800 and D-1100

Objective: To provide changes as required for improved quality, function, cost, assembly methods. Follow-up engineering and design improvements are necessary to maintain a position of leadership and customer acceptance. Also provide preliminary investigation on design and/or programs which have potential for major development projects.

Commitment: Review customer and sales complaints and investigate production problems. Explore and make design changes as required. Complete design and testing of integral ejector and follow-up in production. Investigate potential design programs and marketing requests.

Personnel Assigned: Brooks

Design Personnel	(1.8) Man years
Test Personnel	(.3) " "

Budget: Operating Expenses 1981 \$ 375M (including testing)  
Research Capital Project/Expenses \$ 0

Uncertainties:

- Will design improvements be acceptable?
- Can cost increase (s) for improvements be balanced by a satisfactory R.O.I. and/or justification?

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<u>Program Steps and Timing</u>	<u>Responsibility</u>	<u>Completion Date</u>
1. Complete design work and DU Unlimited Design follow-up and assist production	Brooks	Oct. '80 June '81
2. Complete investigation of rust prevention or plating for use on the model piston and piston seal.	Brooks	Dec. '80
3. Continue with minor programs and investigation to improve the product and reduce cost.	Brooks	as needed
4. Investigate and improve M700 Fire Control tolerances	Brooks	March '81
5. Investigate Model 700 feeding problems and provide design improvements.	Brooks	Dec. '81
6. Investigate 12 Ga. fire control on Model 1100 to eliminate don't lock open malfunctions	Brooks	Dec. '81
7. Make necessary design improvements as requested from Marketing and Production to various models as required.	Brooks	as needed

WEAPONS RESEARCH DIVISION

CATEGORY I

Origination Date Aug. 1, 1980

Update(s) \_\_\_\_\_

Project Title: C.F. Bolt Lock Improvement Program

Project No.: C-3000

Objective: To develop a method to lock the bolt handle into position without interference with the operation of the fire control.

Commitment: Design a manual latch arrangement which in turn will release upon firing. Design is to be complete by Sept. 1980 for transmittal for the new carbine.

Personnel Assigned: Martin  
Design Personnel (5) Man years

Budget: Operating Expenses 1981 \$ 75M. (including testing)  
Research Capital Project/Expenses \$ 0

Uncertainties:

- Will Marketing accept the design of a latch which is thumb operated?

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<u>Program Steps and Timing</u>	<u>Responsibility</u>	<u>Completion Date</u>
1. Test five (5) models and make design revisions.	Martin	Dec. '80
2. Transmittal of drawings.	Martin	Jan. '81
3. Trial and Pilot.	P.E. & C	Oct. '81
4. Trial and Pilot audit test.	Martin	Sept. '81
5. Warehouse	Production	Sept. '81
6. Announcement		
7. Design follow up and assist PE&C and production.	Martin	As required

NOTE: To run concurrently with bolt action carbine project.