SHEET A

REMINGTON ARMS COMPANY, INC.
CAPITAL APPROPRIATION REQUEST

Date:
Title:

Site:
Category:

Justification:

Current:
The current M/700 X-Mark Pro Trigger Assembly does not allow the consumer to adjust the Trigger pull themselves. Four years ago, Savage introduced the AccuTrigger which offers adjustment of Trigger pull by the consumer. Sako, Browning, Winchester, Thompson Center, and Smith & Wesson now all offer consumers an adjustable Trigger. It is critical that Remington develop an externally adjustable X-Mark Pro Trigger to protect our Market Share.

Proposed:
R&D has re-designed, and tested an externally adjustable X-Mark Pro Fire Control. This re-designed X-Mark Pro Fire Control will require a new Trigger and Trigger Housing Rear Spacer from PMPD, as well as additional processing. The design also introduces a secondary Trigger Pull Screw and Spring. The secondary Screw and Spring are easily accessible and will allow the customer to easily adjust the Trigger pull weight.

Benefits are highlighted below:
1. The new design allows the Trigger pull to be adjusted at Final Inspection without the need to remove the Stock from the Rifle.
2. The introduction of an externally adjustable Trigger matches our competition's offerings and preserves market share.
3. Minor changes to the processing and assembly of the new X-Mark Pro Fire Control will also allow us to produce the externally non-adjustable version of the X-Mark Pro Fire Control.

This CAR provides the needed funds required to produce M/700 Externally Adjustable X-Mark Pro Trigger Assembly.

3/7/2008

M/700 X-Mark Pro Trigger Assembly - Externally Adjustable

Project No.	
Budget Amount:	
Budget Period:	
Annualized Cost:	$ 720,406
R O I C:	-217.7%
Payback:	-

Ilion, New York

Necessity & Support:

Maintenance of Production	
Health & Safety	
Expansion & Improvement	X
R & D	

	Expenditures
Capital Amount	$ 293,995
Operations Amount	$ 36,861
Total Project Commitment	$ 330,856

An Economic analysis indicates a cost increase of ($4.94)/unit on an incremental basis, and ($720,406) annually based on (146,000) units.

Submitted By:

Approvals:

C. J. Lane Jr.

R. Krol

S. Perniciaro

R. Skinner

Craig Becker

Date	J. Gross Date
Date	J. Gyure Date
Date	S. Jackson Date
Date	T. Torbeck Date

BARBER - RE 0002299

Sheet B

Remington Arms Company, Inc.
Capital Appropriation Request
Support Detail
Exhibit III

M/700 X-Mark Pro Trigger Assembly - Externally Adjustable

Capital Costs	
Tooling, Gauges, Dies, Molds	$ 153,322
Buildings	$ -
Equipment & Machinery	$ 140,673
Computer Software	
Computer Hardware	
Contingency	
Total Capital Cost	$ 293,995
Charges to Operations	
Tooling, Gauges, Dies, Molds	$ 14,240
Ammo	$ 5,865
Guns	$ 13,756
Trial & Pilot	$ 500
Dismantle & Rearrange	$ -
Travel	$ 2,500
Total Operations Cost	$ 36,861
Total Authorization Requested	$ 330,856

BARBER - RE 0002300

Sheet C

Remington Arms Company, Inc.
Capital Appropriation Request
Calculation of Annualized Savings
Exhibit IV

M/700 X-Mark Pro Trigger Assembly - Externally Adjustable

* Do Not Fill in Shaded Areas

Calculation of Annualized Savings			
Cost Basis	**Present**	**Proposed**	
Sales Information, if applicable			
Sales Volume			
Net Sales Price			
Sales Dollars			
Material	$ 864,320	$ 1,109,600	Exhibit "A"
Direct Labor	$ 1,500,568	$ 1,788,188	Exhibit "A"
Variable Overhead (Maintenance)	$ 697,157	$ 824,177	Exhibit "A"
Product Scrap			
Fixed Costs (Including asset write-offs)			
Book Depreciation	$ -	$ 60,486	
Interest Expense		$ 28,123	
Total	$ 3,062,045	$ 3,810,573	
Annualized Savings, Net Savings, Earnings or (Loss) (Int not Included)		$ (720,406)	
Project Expenditures:			
Capital		$ 293,995	
Total Related Operations		36,861	
Total		$ 330,856	
Return on Investment Capital		-217.7%	
Payback		-	

BARBER - RE 0002301

BARBER - RE 0002302

Sheet D
Remington Arms Co., Inc.
Firearms Division
Capital Summarization (Supplement to Exhibit III)

**Do Not Fill In Shaded Areas

	Quantity	Per Unit Cost	Cost	Shipping	Installation	Total Cost	Check One: Eng Estimate	Vendor Quote
Buildings			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
			0			0		
Total			0	0	0	0		
Machinery & Equipment								
			$ -			$ -		
(2) Spindle Drill Press	1	14,791	14,791	1,100	20,000	$ 35,891	x	x
(2) Spindle Drill Press	1	7,170	7,170	-	-	$ 7,170		x
(1) Spindle Drill Press	1	8,144	8,144	-	-	$ 8,144		x
Tapping Head	1	908	908	-	-	908		x
50X Comparator	1	8,050	8,050	-	-	8,050		x
Dvorak Trigger Scan Instrument	2	2,795	5,590	70	-	5,660		x
Dr KJ Trigger Pull Monitor	1	74,850	74850	-	-	74,850		x
Total			$ 119,503	$ 1,170	$ 20,000	$ 140,673		
Molds, Gauges, Dies Tooling								
Drill Fixtures and Gages	1	21,822	21,822	200	-	$ 22,022	x	x
Inspection of gages & fixtures	1	1,600	1,600	-	-	1,600	x	
(4) Cavity Mold - MIM Trigger Blank	1	59,200	59,200	-	-	59,200		x
Sizing Tool - MIM Trigger Blank	1	13,000	13,000	-	-	13,000		x
Rear Spacer Blank PM Mold	1	7,500	7,500	-	-	7,500		x
Comparator Fixture Rework	2	5,000	10,000	-	-	10,000	x	
Fixtures for Final Inspect operation	2	20,000	40,000	-	-	40,000	x	

SUBJECT TO PROTECTIVE ORDER - KINZER V. REMINGTON

BARBER - RE 0002303

BARBER - RE 0002303

Vendor Name	Useful Life
	25
	25
	25
	25
	5
	5
	5
	5
	5
	5
	5
	5
	5
	5
	5
	5
	5
	5
	25
	15
McQuade & Bannigan	15
McQuade & Bannigan	15
McQuade & Bannigan	15
McQuade & Bannigan	15
Avery-Hall Corp	15
Dvorak Instruments	15
Dr. Khosrowjerdi	15
	15
Progressive Machine & Design	3
	3
Remington PMPD	3
Remington PMPD	3
Remington PMPD	3
	3
	3

RE0002275

			-			-		
Total			153,122	200	-	153,322		

Computer Software								
			0			0		
			0			0		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
			-			-		
Total			-	-	-	-		

Computer Hardware								
			-			-		
			-			-		
			-			-		
			-			-		
Total			-	-	-	-		

3

3	5	5	3	3	3	3	3	3	5	5	5	5	3

5	5	5	5	5

RE0002277

BARBER - RE 0002305

Cell: G35
Comment: vallabhacp:
Est by Rich Morris & given to Craig.

Cell: D47
Comment: vallabhacp:
Toolroom

Cell: A52
Comment: vallabhacp:
for Trigger Pull Test by Final Inspector.

BARBER - RE 0002306

Sheet E
Remington Arms Co., Inc.
Firearms Division
Ops Summarization (Supplement to Exhibit III)

**Do Not Fill In Shaded Areas

							Check One			
	Quantity	Per Unit Cost	Cost	Shipping	Installation	Total Cost	Eng Estimate	Vendor Quote	Vendor Name	Useful Life
Molds, Gauges, Dies, Tooling										
Alter existing Rivet Fixture	1	1,000	1,000	-	-	1,000	x			
Step Drill	24	30	720	-	-	720	x			
Step Drill	24	30	720	-	-	720	x			
Piloted C'Bore	12	75	900	-	-	900	x			
Taps	24	25	600	-	-	600	x			
Chatillion Scales	6	100	600	-	-	600	x			
Benches / Tables	7	714	5,000	-	-	5,000	x			
(2) PCs	2	1,100	2,200	-	-	2,200	x			
MIM Development Cost (Trigger)	1	2,500	2,500	-	-	2,500		x	Remington PMPD	
			-			-				
Total			14,240			14,240				
Ammo	25,500	0.23	5,865			5,865	x			
			-			-				
Total			5,865			5,865				
Guns			-			-				
M/700	38	362	13,756			13,756	x			
	-	-	-			-				
Total			13,756			13,756				
Total D&R			-			-				
Total T&P	1	500	500			500	x			
Total Travel	5	500	2,500			2,500	x			

Cell: A10
Comment: vallabhacp:
Trigger housing assembly

Cell: A15
Comment: vallabhacp:
Springs

Cell: C25
Comment: vallabhacp:
For EET (Eng'g Evaluation Test) +
DAT (Design Acceptance Test).

Cell: D25
Comment: vallabhacp:
P?N: 20040 per Bob Joy

Cell: D30
Comment: vallabhacp:
Weighted Avg Cost/gun

Cell: D38
Comment: vallabhacp:
(3) Trips @ $400 (Fixtures)
(2) Trips to Dr KJ @ $500

BARBER - RE 0002308

M/700 X-Mark Pro Trigger Assembly - Externally Adjustable
Cost Comparison
<u>Proposed Design Vs. Current Design</u>

Material

Labor W/EBs

Mfg Overhead

Total incremental Cost/unit

Plant Fixed Overhead

Depreciation - New Investment

Total Mfg Cost/unit

(x)

(y)

(z)

2008 Annual Volume (Units)

BARBER - RE 0002309

Unit Cost	
Current Design	
(F305571) (a)	Additional components & Operations (b)
$ 5.92	$ 1.68
$ 10.28	$ 1.97
$ 4.78	$ 0.87
$ 20.97	**$ 4.52**
$ 13.58	$ 2.47
$ -	$ 0.42
$ 34.55	**$ 7.41**

Incremental Cost - Proposed Design	**$ 25.91**

Secondary Trigger Pull Screw ($1.53) + Secondary Trigger Pull Spring ($0.04) + Re-designed Trig Housing Rear Spacer ($0.11).

Additional machining operations - Trigger ($1.10) + Trigger Assembly ($0.60) + Trig Housing Assembly ($0.27).

Manufacturing Overhead associated with additional machining labor

Annual Cost	
Current Design	
(F305571) (a)	Additional components & Operations (b)
146,000	

BARBER - RE 0002310

EXHIBIT "A"
3/7/2008
(Capital Proj - X-Mark Pro Externally Adjustable Trg Assy)

Proposed Design

		Total (a+b)
(x)	$	7.60
(y)	$	12.25
(z)	$	5.65
	$	**25.49**
	$	16.05
	$	0.42
	$	**41.96**

($25.49+$0.42)

Proposed Design

Total (a+b)
146,000

Material	
Labor W/EBs	
Mfg Overhead	
Total Incremental Cost/unit	
Plant Fixed Cost	
Depreciation - New Investment	
Total Mfg Cost/unit	

BARBER - RE 0002312

$ 864,320	$ 245,280
$ 1,500,568	$ 287,620
$ 697,157	$ 127,020
$ 3,062,045	**$ 659,920**
$ 1,982,680	$ 360,620
$ -	$ 60,486
$ 5,044,725	**$ 1,081,026**

BARBER - RE 0002313

$ 1,109,600
$ 1,788,188
$ 824,177
$ 3,721,965
$ 2,343,300
$ 60,486
$ 6,125,750

RE0002286

Cell: J10
Comment: vallabhacp:
New Add'l Parts:
Secondary Trigger Pull Screw $1.53
Secondary Trigger Pull Spring $0.04

Re-designed Trigger Housing Rear Spacer $0.11
(From PMPD - $0.26 Vs. $0.15)

Cell: J12
Comment: vallabhacp:
Add'l Operations:
Trigger before Plate - $1.10 (Dept #8773)
Trigger Housing Assy - $0.27 (Dept #8773)
Trigger Assembly   - $0.60 (Dept #8772)
(D/P operations)

Cell: J14
Comment: vallabhacp:
Mfg O/H associated W/Add'l Operations.

BARBER - RE 0002315

M/700 X-Mark Pro Trigger Assembly - Externally Adjustable
<u>**Additional Components & Operations**</u>

- o Secondary Trigger Pull Screw
- o Secondary Trigger Pull Spring
- o Re-design Trigger Housing Rear Spacer
  (PMPd part - Proposed Vs. Current)
- o Additional machining operations -
  - o Trigger
  - o Trigger Housing Assembly
  - o Trigger Assembly
- o Depreciation - new investment

BARBER - RE 0002316

3/7/2008

(Capital Proj - X-Mark Pro Externally Adjustable Trig Assy)

Material	Labor W/EBs	Mfg O/H	Plant O/H	Total Cost
$ 1.53	$ -	$ -	$ -	$ 1.53
$ 0.04	$ -	$ -	$ -	$ 0.04
$ 0.11	$ -	$ -	$ -	$ 0.11
$ -	$ 1.10	$ 0.64	$ 1.42	$ 3.16
$ -	$ 0.27	$ 0.15	$ 0.34	$ 0.76
$ -	$ 0.60	$ 0.08	$ 0.71	$ 1.38
			$ 0.42	$ 0.42
$ -				
$ 1.68	**$ 1.97**	**$ 0.87**	**$ 2.89**	**$ 7.41**

Incremental Cost Increase/unit: $ 4.94

BARBER - RE 0002317

BARBER - RE 0002318

Cell: N7
Comment: vallabhacp:
Excluding departmental Depreciation.
Depr added separately when calculating gross savings/Cost increase.

Cell: D17
Comment: vallabhacp:
Dept #8773 (Machining)

Cell: P17
Comment: vallabhacp:
Does not include depr cost. Added in the Savings calculation sheet.

Cell: D19
Comment: vallabhacp:
Dept #8773

Cell: P19
Comment: vallabhacp:
Does not include depr cost. Added in the Savings calculation sheet.

Cell: D21
Comment: vallabhacp:
Dept #8772 (Assy)

Cell: P21
Comment: vallabhacp:
Does not include depr cost. Added in the Savings calculation sheet.

Cell: P23
Comment: vallabhacp:
Does not include depr cost. Added in the Savings calculation sheet.

Cell: P26
Comment: vallabhacp:
Does not include depr cost. Added in the Savings calculation sheet.