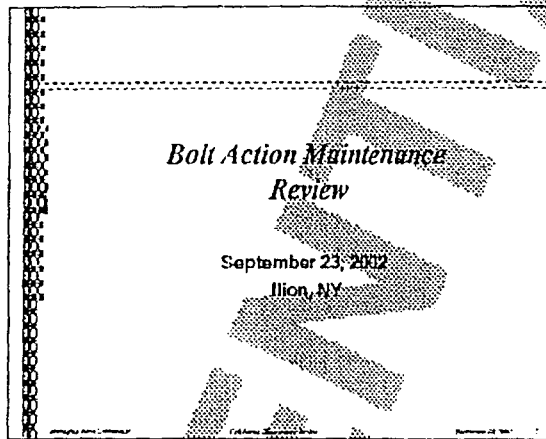
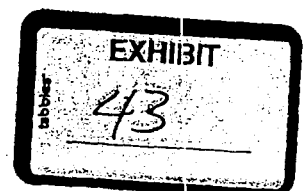




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ETE00023524

<i>Agenda</i>	
☐ Background Summary	Diaz
☐ Project Design Objectives	Diaz
☐ EET Designs Tested	Ronkainen
☐ Design Down-Selection Logic	Ronkainen
☐ DAT SKU Selection Method	Ronkainen
☐ DAT Scope and Key Activity	Banner
☐ Fire Control Comparison	Ronkainen
☐ Project Status	Ronkainen
☐ Manufacturing Costs	Perniclaro
☐ Path Forward Discussion	Bristol

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Background Summary

- First Bolt Action Review Meeting was Nov. 14, 2000
 - ✓ Reviewed customer returns and return procedures
 - ✓ Reviewed cleaning instructions
 - ✓ Reviewed manufacturing process
 - ✓ Decided to start a lubrication study
- Dec. 2000
 - ✓ 10 point check system for returns
 - ✓ Revised Internet customer return form
 - ✓ Revised cleaning instructions
 - ✓ Changing to stainless steel trigger pivot pin
 - ✓ Added warning to www.remington.com
 - ✓ Lubrication Study S.O.P. initiated 12/06
- Jan. 2001
 - ✓ Shot Show meeting: Development Plans and Design Objectives approved
 - ✓ Solicited fire control designs from E-Tech and B&B engineers based on approved design objectives

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Background Summary (cont'd)

☐ Feb. 2001

- ✓ Reviewed all design submittals with Remington engineers and outside consultant
- ✓ Pared the list down to 4 fire controls

☐ March 2001

- ✓ Reviewed 4 designs with manufacturing
- ✓ Based on manufacturing meetings with selected 2 designs
- ✓ Generic fire control discussion with a writer

☐ April 2001

- ✓ Program review meetings with all members of team
- ✓ Manufacturing review of 2 selected designs, in lion

☐ May 2001

- ✓ Lubrication study complete
- ✓ EET starts on Safety Pivoted Link and Trigger Cam Designs

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Project Design Objectives

☐ Design Requirements

- ✓ Positive return of trigger to at least 75% of full engagement when safety is in SAFE position
- ✓ Safety must not return to SAFE position if return to 75% of full engagement is not possible
- ✓ Block trigger when safety is in SAFE position
- ✓ Fit into a M700 action

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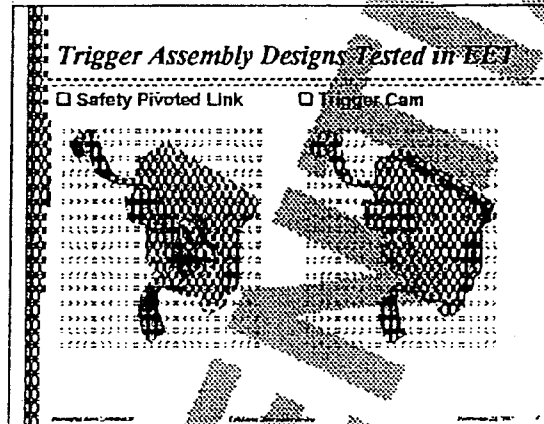
Project Design Objectives (cont'd)

☐ Optional Features (Nice to Have)

- ✓ Block both trigger and sear in SAFE position
- ✓ Corrosion resistant construction
- ✓ No or minimal lubrication required
- ✓ Tamper resistant
- ✓ Same or fewer parts than the current trigger assembly
- ✓ Improved performance characteristics
- ✓ Design portable to the M710

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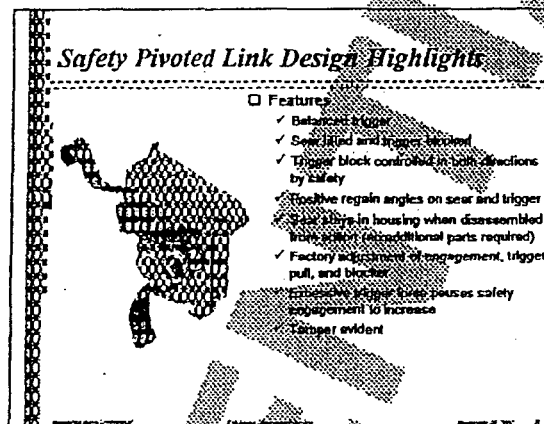


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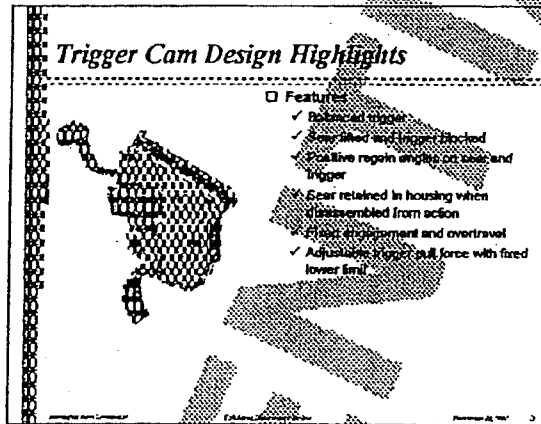
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Project Design Objectives Rack Up

☐ Design Requirements Comparison

	Safety Pivoted Link	Trigger Cam
Positive return of trigger to at least 75% of full engagement	Yes	Yes
Safety must not return to SAFE position if return to 75% engagement not possible	Yes	Yes
Block the trigger in the SAFE position	Yes	Yes
Fit into M700 action	Yes	Yes

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Project Design Objectives Rack Up

☐ Optional Features (Nice to Have) Comparison

	Safety Switch Lock	Trigger Cam
Block both trigger and eazr in SAFE	Yes	Yes
Corrosion resistant construction	Yes	Yes
No or minimal lubrication required	Yes	Yes
Temper resistant	Yes	Yes
Same or few parts than current trigger assembly	Yes (21 vs. 24)	Yes (19 vs. 24)
Improved performance characteristics	Yes	Yes
Design portable to M2 (t)	Should be	Uncertain

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Design Selection for DAT

☐ Safety Pivoted Link Design

- ✓ Meets all primary and "nice to have" design objectives
- ✓ Drops into all stocks except HS Precision without stock modification
- ✓ Easier to assemble and make settings -- similar to current methods
- ✓ Controls trigger blocking mechanism at all times
- ✓ More consistent safety operating process
- ✓ Easier to service
- ✓ Requires less capital tooling to produce LH version

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DAT SKU Selection Criteria

SKU	Category	Sub-Category	Brand	Model	Price	Weight	Length	Width	Height	Volume	Weight	Length	Width	Height	Volume
10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000	10000000000000000000

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<i>DAT Scope</i>	
☐ Measure / Build / Adjust	☐ Function & Endurance
✓ Components ✓ Firing Pin Head / Sear Engagement ✓ Blocker ✓ Trigger Pull ✓ Regain Test ✓ Safety On/Off Forces ✓ Firing Pin Indent ✓ Locktime ✓ SAAMI Safety Pull Test ✓ Remington Trigger Pull Test ✓ RSS System Check ✓ Proof and Headspace	25 guns @ 500 rds 25 guns @ 1000 rds 4 guns to 2000 rds - Dry Cycle (3 PCs @ 100 rds)
	☐ Intentional Abuse / Environmental
	✓ Shock/Drop/Rotation ✓ Extended SAAMI Jau/Drop/Rotation ✓ Start Test ✓ Electromagnetic Test ✓ Dynamic Sand and Dust Test ✓ Accelerated Corrosion Test ✓ Hot (120°F) ✓ Cold (-20°F) ✓ Heat & Humidity (100°F / 80% RH) ✓ Thermal Cycle Test

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Key DAT Activity

- ☐ **Component / Assembly Build and Inspection**
 - ✓ Extensive Component Dimensional Inspection - 20% Dimensional Checked
 - ✓ LARGO Swaps: 100 → 80 Trigger Inspections
 - ✓ Perceptive Tracking of Trigger PUA, Engagement, and Blocker Performance
- ☐ **Full breadth of M700 and Seven product lines**
 - ✓ 57 guns / 24 GUs / 10 calibers plus ML
- ☐ **Jar, Drop, Rotation, and Slam Sensitivity**
 - ✓ 840 SAAMI Jar/Drop/Rotation Drop Completion
 - ✓ Over 1000 Extended SAAMI Jar/Drop/Rotation Drop Completed
 - ✓ Slam Test Completed
- ☐ **Endurance Testing:**
 - ✓ 63 guns = 800 mds / 24 Guns = 1K mds / 4 guns = 2K mds
 - ✓ 4200 total endurance rounds fired
 - ✓ Dry Cycle (3 Precedence fire 600 cycles each)
- ☐ **Extensive environmental testing**
 - ✓ -20F through +120F including Thermal Cycling
 - ✓ Dust and Debris
 - ✓ Corrosion
- ☐ **Direct Resources**
 - ✓ Component Inspection: 63 Man-days
 - ✓ DAT Emulation: 180 Man-days

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<i>Trigger Assembly Specification Comparison</i>			
	Current	New	Adjustable?
☐ Engagement	0.018 - 0.020	0.018 - 0.021	Adjustable
☐ Trigger Pull	4.5 - 6.5 lbs.	5.5 - 6.5 lbs.	Adjustable
☐ Overtravel	~.025	NA	Adjustable
☐ Blocker	NA	2.903 Max*	Not User Adjustable
	*measured with 7.62 Rem. caliber trigger		
☐ Sear Lift	0.008 - 0.016	0.008 - 0.016	Not Adjustable

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Project Status

☐ Design Complete / DAT Complete	
✓ Transmittal Package:	Ready for Transmittal
✓ DAT Report Available:	09/20/02
☐ Non-DAT Evaluation Activity	
✓ Lubricant Variability Assessment	09/19/02
• Effects of Lubricant on Trigger Pull	
• Dry Moly and RemOil Optimal	
✓ New MIM Firing Pin Head Test	06/23/02
• SAAMI jar-off sensitivity test	
• Limited Sample Size	

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