M/700 Enhancement Program: David Findlay and Derek Watkins

The Model 700 performance enhancements program is developing improvements to the accuracy of the rifle. Two areas of investigation will be rifling design (5R primarily) and bedding changes. Recoil reduction is another objective of the program. Two areas of investigation are the addition of a muzzle break to reduce recoil with the additional aim of reducing the peak noise level, plus an investigation of recoil pad materials and design. An additional aim of the program is a new fire control design which will ensure engagement of the trigger and incorporate a bolt lock mechanism. Two distinct design approaches are being detailed, both utilize a three position safety. Lastly, a new ergonomic stock design is being designed to utilize soft inserts which may be customer adjustable.

	Development Milestones	Start / Completion Date		Resource Required/Qty./Duration	
1.	Definition	10/20/95	11/15/95	Team	
2.	Preliminary Design				
	Firecontrol Modeling	10/20/95	11/30/96	Engineers (2)	
	Firecontrol Detailing	11/15/95	01/01/96	CAD Detailer (2)	
	Muzzle Break Modeling	11/01/95	11/11/95	Cad Designer (1)	
	Muzzle Break Detailing	11/11/95	11/15/95	Cad Designer (1)	
	SR Rifling Design	11/15/95	12/31/95	Engineer (1)/Ammo Eng. (1)	
	5R Rifling Detailing	11/30/95	01/15/96	Cad Detailer (1)	
	Recoil Pad Material and Design	11/15/95	01/15/96	Materials Engineer (1)	
	Recoil Pad Detailing	01/01/96	01/15/96	Cad Designer (1)	
	Epoxy Bedding Design	09/01/95	12/15/95	Engineer (1)	
	Epoxy Bedding Detailing	12/15/95	01/15/96	Cad Detailer (1)	
	Nasset Bedding Design	12/15/95	01/15/96	Engineet (1)	
	Ergonomic Stock (soft inserts)	12/15/95	08/15/96	Materials Eng. (1) / Designer (1)	
3.	Kinematics Analysis (Firecontrols)	10/20/95	01/30/96	Kinematics Engineer (1)	
4.	First Prototype				
	Firecontrol No. 1 (5)	01/01/96	04/15/96	Machine Shop	
	Firecontrol No. 2 (5)	01/01/96	04/15/96	Machine Shop	
	Muzzle Break (5)	11/15/96	01/15/96	Machine Shop	
	SR Rifling (25 per cal.)	01/01/96	06/15/96	Machine Shop/Ilion bbl. shop	
	Recoil Pad (10)	01/01/96	04/15/96	Machine Shop PLAINTIFF'S	
	Epoxy Bedding (10)	01/01/96	04/15/96	Machine Shop	
	Nasset Bedding (10)	Complete	Complete		
	Ergonomic Stock (soft inserts)	01/15/96	03/15/96	Machine Shop/Custom Shop	

ET60571

Remington Arms Confidential

Confidential - Subject to Protective Order Williams v. Remington Remington Arms Technical Center

.

.

.

. •

5.	Test I / Acceptance Testing Firecontrol (5)	04/15/96	07/15/96	Lab Tech (2)		
	Muzzle Break (5)	01/15/96	03/15/96	Lab Tech (2)		
	5R Rifling (25 per cal.)	06/15/96	09/15/96	Lab Tech (2)		
	Recoil Pad (10)	04/15/96	06/15/96	Lab Tech (1)		
	Epoxy Bedding (10)	04/15/96	06/15/96	Lab Tech (2)		
	Nasset Bedding (10)	11/15/95	01/15/96	Lab Tech (2)		
6.	Review					
	Firecontrol	07/15/96	07/30/96	Team		
	Muzzle Break	03/15/96	03/20/96	Team		
	SR Rifling	09/15/96	09/20/96	Team		
	Recoil Pad	06/15/96	06/20/96	Team		
	Epoxy Bedding	06/15/96	06/20/96	Team		
	Nasset Bedding	01/15/96	01/20/96	Team		
	Ergonomic Stock (soft inserts)	03/15/96	05/15/96	Team / Marketing		
7.	Final Design Firecontrol (One Design Selected)	07/30/96	09/30/96	Engineer (1) / Cad Detailer (1)		
			0710070	Engineer (1)7 Cau Detailet (1)		
	Muzzle Break (other Calibers)	03/20/96	05/30/96	Engineer (1) / Cad Detailer (1)		
8.	Second Prototype Build Firecontrol (50)	08/30/96	11/30/96	Machine Shop		
	Muzzle Break (other Calibers -5)	05/30/96	07/30/96	Machine Shop		
	Nasset Bedding (10)	1/30/96	4/30/96	Machine Shop		
	Ergonomic Stock (soft inserts) (50)	08/15/96	02/15/97	Mold Vendor		
9.	Acceptance Testing Firecontrol (50)	11/30/96	01/30/97	Lab Tech. (3)		
	Muzzle Break (other Calibers -10)	07/30/96	08/30/96	Lab Tech. (2)		
	Nasset Bedding	4/30/96	6/30/96	Lab Tech (2)		
	Ergonomic Stock (soft inserts) (50)	02/15/97	04/15/97	Lab Tech (1)		

ET60572

.

Confidential - Subject to Protective Order Williams v. Remington

Remington Arms Confidential

10, Transmittal

Firecontrol	01/30/97	02/15/97	Team
Muzzle Break (30-06308) Muzzle Break (all others)	03/15/96 08/30/96	04/30/96 09/30/96	Team Team
5R Rifling	09/30/96	10/30/96	Team
Recoil Pad	06/30/96	07/20/96	Team
Epoxy Bedding	06/15/96	07/30/96	Team
Nasset Bedding (Need Licensing Agreement)	06/15/96	07/30/96	Team
Ergonomic Stock (soft inserts)	04/15/97	. 04/30/97	Team

Catalog Sample
Documentation Package (Complete)

13. Executive Review

14. Outdoor Writers Conference

National Sales Meeting

ET60573

Confidential - Subject to Protective Order Williams v. Remington

Remington Arms Confidential