

## PROJECT CHARTER

**PROJECT NAME: Bolt Action Trigger Pull Variation for XMP Trigger Assembly**

Team Leader (Belt):	Jim Ronkainen	Champion:	
Belt Phone Number(s):	270-769-7613	Process Owner:	
Product(s) Impacted	Model 700 and Seven rifles	Production Area impacted by project:	
<b>Element</b>	<b>Description</b>	<b>Team Charter</b>	
1. Process:	High level description of current process.	Investigate the causes of trigger pull force variability on the X-Mark Pro (XMP) trigger assembly.	
2. Project Description:	Describe the Project's business purpose and info about current process situation.	This purpose of this project is to investigate the causes of variation in trigger pull force on the XMP trigger assembly to understand the sources of variation and identify changes that minimize the dispersion of measured trigger pull and permit better control. Our customers will benefit from this program because we will provide a more consistent feeling trigger than our competitors.	
3. Project Objective:	Quantify the Project Goal in terms of improvement metric.	The goal of this project is to understand the causes of trigger pull variation with the XMP trigger and address them through design and process changes to minimize the trigger pull variation of the trigger assembly.	
4. Current Process Measurements/ Metrics	How is the process currently being measured? What are the current values?	I believe trigger pull is currently being measured with a Chatillon IN-010M spring scale (0-10 lbs, 4 oz. increments) and the acceptable range of values is from 3.5 to 5.5 lbs. There has been some discussion regarding changing the tools used to measure trigger pull, but I do not know the current status of those changes.	
5. Performance Objective:	What metrics are targeted for improvement?	<b>Measures</b>	<b>Baseline</b>
		<b>Goal</b>	<b>Units</b>
			%
			%
	<i>Are there any other key metrics to track?</i>		%
6. Business Results:	What is the improvement in business performance, both an annualized and current year impact (based on completion date).	The improvements in trigger pull may allow marketing to create an advertising campaign touting the consistent performance of the trigger assembly, which may help increase product sales of these high margin products.	
7. Team members:	Who are the full-time team members? Part-time team members?	Craig Becker, Jim Parkhurst, Jim Doolittle, Dave Camera. Conducting the studies and implementing any changes will require the active participation of manufacturing engineering, production, Ilion's new product implementation group. The Test Lab may also play a part time role in assisting with the studies.	

8. Project Scope:	Which part of the process will be investigated? Where does the process begin and end. List any area that are not in scope.	All aspects will be investigated including the trigger assembly's design, trigger pull measurement tools/apparatus, and the effect of external influences (i.e. the parts of the gun that interact with the trigger assembly) on trigger pull. The contribution of the different factors to the variation seen will be quantified.	
9. Benefit to External Customers:	Who are the final customers or shareholders, what benefits will they see and what are their most critical requirements?	Remington's end customers will be the biggest benefactors of this project because they will have the most consistent performing trigger assembly for a bolt action rifle in the marketplace. This may also be a performance feature that marketing can build an advertising campaign around.	
10. Schedule:	Key phases, milestones/dates.	Project Start	
		Project Completion	
		Process Owner	