Marketing Assessments of Current Firearm Technology Projects

- Recoil Quantification / Gel Recoil Pad: This project has been on the technology agenda for at least three years. It has not produced anything tangible to date. While marketing believes the technology has value, it must have an established deadline or be eliminated. It should not be delayed in part waiting for the NAS to be commercialized.
- Titanium Receiver: Marketing believes this has potential to create an ultra light bolt action rifle. Again this project has been on the technology agenda for at least three years and little has been accomplished. The project should be completed or killed.
- 11-87 Aluminum Receiver This project has been on the R&D technology agenda for at least two years. From a marketing perspective the potential to lower the cost of the receiver while reducing its weight was the initial attraction to its undertaking. Again, as with the other projects, measurable performance is not apparent and performance criteria is required or it should be dropped.
- Metal Matrix Composite Shotgun Receiver: No particular interest in this technology since it copies the Benelli technology used in the Nova pump shotgun. Fundamentally, a high grade composite / synthetic should be able to be utilized without a skeleton framework to mold an 870 receiver. This will eliminate warping problems experienced with the metal matrix.
- Ceramic Injection Molded 597 Hammer and Sear: Marketing feels that this technology should be further investigated with defined objectives and deadlines.
- Artificial Wood Stock: Marketing would like to approach this project in a different way Suppose a stock could be made from sawdust and resin in a high pressure mold. The cost of the components would be greatly reduced and the opportunity to create a wood like appearance may be achieved.



- Gas Assisted Molding Technology: Improvement of the cosmetics and cost of current long and short stocks. This is primarily a manufacturing concern and opportunity.
- EtronX Miniaturization: This project is essential to the second generation of the hunting EtronX. It also should provide the business with a significant cost reduction opportunity for the EtronX product.
- Zero Displacement Trigger: This project is likely to be tied to EtronX development effort. While this is an attractive attribute the present trigger on this gun is significantly improved over the current mechanical version. R& D resources should not be employed at major levels to continue to improve upon the current design.
- Low Cost Scope: This project should be abandoned immediately.
- Composite Bedding Block Research: Marketing can not envision significant improvement in this area since state of the art materials and designs are presently available. The project is attractive from a cost perspective since performance attributes are not likely to be impacted.
- SS Wad Compression Study: Project probably could have an impact on recoil and pattern performance. Ammunition must decide if this project can impact their business.
- Hammer Firing Pin Energy Study: Will not have a marketable impact upon the business. Resources should be allocated accordingly.
- Safe Gun Sensors This should be part of the evolution of the EtronX project. This feature will be more desirable in the future as increased restrictions are legislated against the firearms industry. A safe gun sensor could give Remington a significant competitive advantage.
- Shot Patterning: This project is badly needed as applied to over boring, chokes and their relationships. In addition the performance of non toxic shot in standard bores and over bored barrels needs to be better understood. Significant attention should be given to the length of shot strings.



• Composite Barrel Technology: This effort should continue with particular attention paid to the size of the barrel and the cost to manufacture it. It is quite likely that a low cost composite barrel combined with a titanium receive would provide the business with a ground breaking light weight rifle that would put Remington in a unique competitive position.

Further review of the technology budget and the aflocation of dollars against these projects is required to finalize a plan which will provide the business the most benefit to the firearms business

Subject to Protective Order - Williams v. Remington