

**REMINGTON ARMS COMPANY, INC.**  
**Product Team Meeting Minutes**  
**August 5, 2003 Ilion Meeting (7:30 a.m.)**

**Future Meetings**

Sep 3 Ilion (Note Model 2100 manufacturing review 9/4 in Ilion)  
Dec 2 Madison

**Future Important Dates**

Oct. 16-19, 2003 Writer's Seminar (Daniels, West Virginia)  
Nov. 1-3, 2003 Sales Meeting (Greensboro, NC)  
Feb 12-15, 2004 SHOT Show (Las Vegas, NV)

**Business Review**

Jay Bunting to provide overview of current business environment

**ILION BASED SHOTGUN PRODUCTS**

**2002 New Shotgun Product**

- Model 332  
OBJECTIVE: Establish a legitimate presence in the O/U market  
ACTION: Ilion to report on progress of velocity and quality improvement initiatives (Greater throughput, bring engraving in house, wood quality, etc) and production levels to date. Discussion by team on potential 2005 introduction of a 16/20 gauge Model 332 and what that means to manufacturing assuming production and cost control goals are met on the 12 gauge product.  
Ilion: Current production at 8 guns/day. Plant is on track to bring the engraving of the receiver in house to increase throughput.  
Schoppman: Posed questions to the Team regarding expansion of the O/U category. In particular, how to best go about adding target versions (Sporting and Trap Combo) as well as a small frame version for 16/20 gauge.  
ACTION: R&D has already begun work on the latter and is will be ready to send drawings to Ilion for review in 6-8 weeks.  
ACTION: Schoppman to provide Ilion with a proposal for these line expansions.

**2004 New Shotgun Product**

- Barrel Porting  
OBJECTIVE: Invigorate the XBL business with something new that can be pitched as a special barrel program. Target date for announcement is November Sales Meeting. Catalog barrels to be ported: Target, Turkey and Deer. First RAMAC to develop is 4624 (10 years of overstock).  
ACTION: Ilion to report on progress and timeline for an opinion on feasibility.  
Ilion: CNC is the right mfg method to do this in production numbers. Approx. \$75K will be needed for machinery/fixtures.  
Schoppman: Will decide on hole design and pattern, taking into account current designs and intellectual property, if any. List of proposed RAMACs already sent to Ilion.  
ACTION: Schoppman to provide volume by RAMAC.

- Embellishment changes to shotgun receivers  
**OBJECTIVE:** Change or eliminate the "dated" embellishment on our current receivers to better respond to market requests.  
**ACTION:** Team to discuss how to best enact this change in terms of future equipment utilization and timing.  
**Schoppman:** 9 - 11-87 RAMACs and 8 - 870 RAMACs will be affected. List of current RAMACs affected will be sent to Ilion via NPP.  
**ACTION:** Schoppman to work with Skinner to plan implementation and not strand inventory of embellished product. New RAMACs may be required.

#### **Shotgun Product – General**

- Low-Cost Shotgun  
**OBJECTIVE:** Provide a 12 gauge pump-action shotgun option with a standard cost of \$100 or less.  
**Action:** Team to discuss the scope, design issues, project costs and potential timeline for such an offering.  
**Schoppman:** R&D to be given full design freedom to achieve the goal of significant cost reduction. Cosmetics and parts commonality with existing product will take a back seat. Specifications will be as a result of benchmarking against current low-cost product in terms of performance, life expectancy, etc.  
**ACTION:** R&D will work up concepts with Mfg input by end of October 03. Will also put a project budget together for 2004.

#### **Remington Military Products**

- Model 870 MCS & "Mil-Spec"  
**OBJECTIVE:** Prepare to provide needed product to US Armed Forces based on feedback from recent AARs and discussions with key procurement personnel.  
**ACTION:** Discussion around the mil-spec process and update from Ilion on progress to date finding out why we failed to secure the contract for MIL-S-3443.  
3 major factors seem to have contributed to this failure to win the contract first solicited for bid in 1993:
  1. Insufficient focus on the product.
  2. Insufficient focus on the Military procurement process.
  3. Insufficient focus on supporting documentation.

**Schoppman:** Informed the team that the DoD is working towards re-writing the ORD for shotguns to redefine them as Combat Weapon Systems, and that the current contract is due for renewal in 2004. Schoppman will ensure that based on past experience and current input from key military sources, Remington will be ready for the next solicitation for product.

**ACTION:** To begin the "back-channel" military procurement process, Schoppman is working with R&D and Mfg to produce a Modular Shotgun system that will be presented to various SOF groups for review in September 03. This will serve as a "foot in the door" for our product in anticipation of the new ORD.

#### **Ilion Quality – Shotguns**

- Shotgun POI  
**OBJECTIVE:** Conformance to SAAMI spec  
**ACTION:** Need samples in Madison of new rib design for evaluation.

Samples due to Marketing. Pending approval by Marketing, by Jan 2004 we should be shipping all new product. Priority of shotguns in which to incorporate these changes first:

1. All 1100 Target, 1100 Classic Field and Synthetic
2. 11-87 Premier and SP/SPS
3. 870 Wingmaster and SPS
4. 870 Express
5. SP-10

ACTION: 11-87 Standard contour samples are due in Madison 8/31 for review.

- 11-87 Super Mag  
OBJECTIVE: Determine necessary changes to make this product to the performance requirements as originally specified.  
Action: Engineering to provide update on design recommendations. Final engineering recommendation due by September Product Team Meeting.  
Ilion: On track to provide the above recommendations. Findlay outlined some key performance improvements and what the ballpark costs would be to implement. The foremost improvement appears to be around the gas collar and the position of the vent holes.  
Schoppman: Existing product ready for shipment will ship as scheduled, but all new product (following requisite testing) will incorporate the design changes outlined by Findlay. This should help significantly in terms of reliability and durability, as according to the data presented, excessive bolt velocities should be reduced to more manageable levels.
- New Subject: SHOT Show Special  
Schoppman: Will introduce a Model 1100 410/25 Sporting to round out the Sporting line.  
ACTION: Mroz to lead the development effort, especially around inclusion of extended Briley choke tubes with the offering. NPP to follow.

### **ILION BASED GENERAL TOPICS**

- Elimination of ISS on common fire control and Model 700, Model 7  
ACTION: Schoppman/Trull to provide direction on replacing the ISS on all Ilion based product. Ilion to provide an update on testing impact and impact to parts lists.  
Action: Ilion to establish schedule for updating 1. M700/7/710/673 Owner's Manual 2. 597 3. Proceed with Common Firecontrol models  
Action: Ilion to establish phase in date by next PTM  
Action: Team agreed to remove "J" off box end label now.  
Action: Ilion & E-Town to work together to establish required testing parameters and timing. Plan to be ready by next PTM.
- Customer/Consumer Issues  
OBJECTIVE: Feedback to Manufacturing on key customer and consumer issues.  
ACTION: Danny Evans to conference in at 11 a.m. to cover top product issues as reported by CSRs and Consumer Service, broken out separately by shotguns and by rifles.  
Put off until September Product Team.
- 3" Chambers in 20 ga deer barrels (NPP 2003-78)  
OBJECTIVE: Uniformity across 20 gauge slug offerings.  
ACTION: Ilion to report on timeline for implementation with regard to new mandrel and SAAMI chamber drawing. By 4<sup>th</sup> quarter, we should be ready for catalog.

Ilion: Alan Serven to submit a chamber drawing at the next SAAMI meeting. The tooling has been purchased and is being set up now. Update due at next Product Team meeting.

- R3 Pad on on Wood Stocks  
OBJECTIVE: Product enhancement  
Plant confirms that we are still on track for Q4 roll in.  
Action: Review at next meeting.

## **ILION BASED RIFLE PRODUCTS**

### **2004 New Rifle Concepts**

- Model 700 CDL (Classic Deluxe)  
**NPP-2004-24 RAMACS(7007,7015,7011,7017,7047,7049,7051,7053)**  
OBJECTIVE: New Product  
Action: Late breaking addition to 2004 line. Review concept, styling, timing to insure catalog inclusion  
Project is on track. J. Doolittle and D. Brewer are working together on securing stock from Boyd's. Cosmetics have been decided upon.  
Action: Trull to explore increasing price. Status report at next PTM.
- Model 7400 Woodmaster  
**NPP-2004-xx (To Be Assigned after discussion)**  
OBJECTIVE: New Product  
This stems from last meeting's discussion on the 7400 performance improvement/ 7400 Classic line. Our Trademark for Woodmaster is about to expire. Haven't used it since the 742. Great opportunity to create some buzz in the category, but we need to make sure the product demonstrates a marked improvement over current 7400 line. Last meeting's discussion lead to a concept that would allow Manufacturing to focus most of their attention to fine tuning the most popular calibers in the category. Trull would propose that the 7400 Woodmaster be a narrow line (2 or 3 sku's at most) that would have some tangible benefits over the current 7400 line (i.e. chrome chambers, Teflon e-nickel finish on internal components, better surface finishes on internal parts, etc) to give a performance edge to the line in order to establish a basis for staying in the category until a new gun is launched. Changes are underway, however, they will not be in full swing until January 2005. Major process improvements identified are: moving orifice holes back, drill and ream orifice hole, improved deburring methods, and roller burnishing chambers.  
ACTION: 7400 Woodmaster will be a 2005 product. Trull will work with legal to insure that we hold the mark. Trull will work on pruning some sku's from the line.
- Model 700 BDL SYN DEJ#8 (New Decorating Process)  
**NPP-2003-88 RAMAC 27507**  
OBJECTIVE: New Product  
Action: Trull to review concept for SHOT Show special and Ilion to advise on status of making sample run.  
Not discussed at length.

### **2005 Prospective Ilion New Rifle Programs**

- Model 700 Synthetic stock redesign  
**NPP-2005-xx**  
OBJECTIVE: Product Enhancement  
Action: Trull to provide direction for this program

Trull reviewed plans with team. Redesign M700 stock along same lines as M/7 & M/7 youth. Design texturing in the grip and fore end areas with rubber overmolded panels in those areas on the premium stainless line. Implement for 2005.

- New Model 700 BDL SS Line  
**NPP-2005-xx**  
OBJECTIVE: Product Enhancement  
Action: Trull to provide direction for this program  
Trull discussed plans for a premium "ultimate all-weather" rifle utilizing hi-tech coatings being tested by Sietsema. Implement for 2005.
- Revision/Replacement of Model 700 ADL SYN line  
OBJECTIVE: Product Enhancement in response to competitive conditions  
Action: Trull to provide direction for this program  
To counter competitive pressures from Howa, Weatherby (Vanguard) and Tikka, as well as other price point offerings, the ADL SYN line needs to be addressed as it is not competitive with other offerings. Trull discussed plans with team to replace the ADL SYN line with a new SPS (Special Purpose Synthetic) line that would utilize a clean barrel, redesigned stock referenced above, hinged floorplate, and R3 recoil pad at price around MSP \$400. Also discussed a mid-ranged stainless model, (SPS Stainless). Priced in the \$475 range to counter competitive offerings by Tikka, Howa, and Weatherby (Vanguard).

#### Ilion Engineering Topics – Rifles

- Alternative Metal Finish for Stainless Rifles  
OBJECTIVE: Product Enhancement  
Action: Engineering to review status  
Sietsema reviewed samples. Particular interest to Trull for rifles is either a E-Nickel Teflon type or Bodycote Boron Carbide Ceramic Thin Film. Sietsema to conduct testing on Bodycote Finish and advise of pricing estimates.  
Action: Review at next PTM.
- Roller Burnish for Rifle Chambers  
OBJECTIVE: Product Enhancement  
Engineering reported at last meeting that this process is being held up due to chamber eccentricity issues. Bulk of problem appears to rest with current CF heading process at Ilion.  
Action: Engineering to provide update.  
Engineering working on process.  
ACTION: Will review at next PTM.

#### Ilion Quality Issues – Rifles

- Bolt-Action Rifle "Lays Left" Issue  
OBJECTIVE: Quality Issue  
Trull invited Norm Chandler to attend last meeting and demonstrate what he and his staff at Iron Brigade discovered in their shop. Norm explained a theory that attributes alignment problems to a torquing/twisting of the receiver. Showed that by heating the receiver, it stress relieved it and allowed it to return to its proper state.

Action: Engineering to evaluate this theory as well as summarize other theories at this PTM. Also, Chandler has been brought in to consult on this. Discuss how he will be utilized.

Shoemaker advised of a cross-functional team assembled that will meet every Tuesday and showed some of the issues that are being evaluated. Chandler was present for this meeting with team.

**ACTION:** Trull to receive weekly status from team meetings. Will revisit at each PTM.

- Model 700/Seven Trigger Pull Weights

**OBJECTIVE:** Quality Issue

Sales and Marketing are receiving a great deal of feed back from customers and consumers that we are losing sales at a devastating level to the Savage Accutrigger offerings.

**Action:** REVIEW STATUS OF MULTIPLE ACTION ITEMS LISTED FROM LAST MEETING BELOW.

Trull/Bunting advised team of critical nature of the perception of Remington trigger pull weights in the market. With 6lb triggers, these guns are at a serious handicap in the marketplace. Competitors with lighter triggers and the new Savage Accutrigger are beginning to put serious pressure on Remington's core Centerfire line. Jerry's Sport Center has already advised Jay that Savages are outselling Remington varmint rifles 3:1 and that Jerry's (a top wholesaler account) will likely not place any orders for Remington varmint rifles on the Spring Gun program. The team came up with the following action items.

**Action:** Focus on returning M700's to 4.0lb nominal (same as M710) trigger pull weight. Perniciaro to review historical data on adherence to SAAMI with M700/M7 firecontrol and report back to Bunting/Trull by end of July.

**Action:** Marketing to work with Arms Service to put instructions on how to adjust M700 trigger pull back in field service manual and also change policy that RARC's can't adjust trigger pull below 4.5lbs. Trull to pursue with Evans and report back to team at next PTM.

**Action:** Trull/Bunting to work with Legal & Mgt. To work towards instructing the end use consumer how to adjust the trigger for pull weight. Plan would call for the use of warnings similar in nature to what D. Wills has outlined for new M504.

**Action:** Diaz to review Savage Accutrigger from an intellectual property perspective to see if a Remington development is possible. Also to review and determine from Research group what work if any has been conducted on an electromechanical trigger. To report back at next PTM.

Ilion is working on a number of things. Much of the testing will be conducted with the ISS transition.

**ACTION:** Will review at next PTM

- Centerfire Rifle Chamber Specs – Ilion reamers as compared to SAAMI

**OBJECTIVE:** Quality Issue

**Action:** Perniciaro to update from last meeting on which chambers could/should be brought back to within SAAMI

Trull, Perniciaro, Bunting discussed after meeting. Perniciaro is considering options and will advise at next PTM.

## **R&D TOPICS**

### **E-Town Development Topics**

- NAS Report

**OBJECTIVE:** Complete a written review of the NAS development program and what was attempted and what was learned, particularly as it relates to the Model 2100.

**ACTION:** Diaz to report status

Report in process. Status review at next Product Team. Draft due in September.

- Model 700/Seven Snaked Firing Pin Spring  
OBJECTIVE: Quality Improvement  
Action: Diaz to review status. How can/will this be utilized with removal of ISS?  
Testing will be conducted in conjunction with ISS removal at E-Town.  
ACTION: Review at next PTM
- Model 597 Performance Improvement  
OBJECTIVE: Performance Improvement of 597  
Action: Trull/Diaz to report on site audit findings  
Action: Discussion on possible ways to improve/modify box  
Trull/Diaz discussed site findings. Basically confirmed what everyone already knew.  
High degree of user sensitivity, combined with adversity to fouling and issues with spring compression. Agreed that there was not a great deal of value in further testing, but more value in solving the problem.  
  
Appears that best options are to make the box taller and thinner (I.D.). This would improve the performance of the stack, exert less outward pressure and ease loading (speculative, not tested yet). Also, follower material change was discussed.  
  
ACTION: Diaz to work with Franz and lay out plan by next PTM.
- Remington Mohawk 22 Program  
Action: Trull to provide direction and solicit input.  
Reviewed old Model 514. This concept is precisely what we are looking for.  
ACTION: Diaz/Murphy to review M514 & M10. Trull to issue NPP.  
All to report at next PTM.

## **MAYFIELD BASED RIFLE PRODUCTS**

### **2004 New Rifle Product – Mayfield**

- Model 504  
OBJECTIVE: New Product  
DAT testing is complete. E-Town engineers spending a lot of time at Mayfield gearing up for T&P run. Production parts are coming in now.
- Model 710 Magnum  
OBJECTIVE: New Product  
Action: Mayfield to review status of heat treated barrels and layout build plan.  
Heat treating process appears to be working. T&P run scheduled for October (300 Pieces of 300 Win Mag). First production scheduled for December.

### **Mayfield Production Topics**

- Model 597 17 HMR  
OBJECTIVE: Production Update  
Orders are holding fairly well, but we should continue to maintain a cautious view, especially with respect to wood issues.  
Action: Review production and order position

Received high volume (3300 pieces) of cancellations for 6516's. 6536's remaining are being cancelled off books. Remaining order position for 6516 is about 8k pieces. Sales predicts half of those are fiction. Planning to work with Mayfield to scale back production to avoid building excess inventory.

- Model 597/710 Barrel Hangtag  
OBJECTIVE: Product Enhancement  
**Action: Mayfield to advise of status**  
**Not discussed.**
- Mayfield Lock  
OBJECTIVE: Product Enhancement  
Golemboski has identified source for lock and Marketing has reviewed and agreed that it is acceptable.  
**Action: Golemboski to provide status update.**  
**Golemboski still waiting on Anne Cohen for final copy of instructions prior to implementing. Matt will also work with Iliion to get Iliion product pictures shown on lock literature.**