

REMINGTON ARMS COMPANY, INC.
Product Team Meeting Agenda
March 4th, 2004 Elizabethtown Meeting (7:30 a.m.)

Future Meetings

April 13th - Ilion
June 16th - Ilion
July 14th - Ilion
August 18th - Madison
September 15th - Ilion
November 17th - Ilion
December 15th - Elizabethtown

Future Important Dates

Feb. 28 th	Customer Early Order Qualification Period Ends
March 3 rd	M2100 Review and Test Fire
March 11 th	Planning Meeting - Madison
March 31 st	Target Rev. 1 Forecast
April 16 th -18 th	NRA Convention-Pittsburgh, PA

Business Review

Jay Bunting to provide overview of current business environment
SHOT Show Business Review

Military & Law Enforcement Products

Ed Schoppman overview and direction of Military products

Competitive Product Review

Starting with 4/13 Meeting, Trull and Fink will conduct competitive product reviews for group

ILION BASED SHOTGUN PRODUCTS

New Shotgun Product

• **Model 332**

OBJECTIVE: Establish a legitimate presence in the O/U market

Production Status:

- Guns per day
- Status of incoming wood
- CAR status of Salt Bleed Out tanks
- Status of 3/5/04 salt bleed out station for O/U's
- Other

ACTION: Perniciaro to contact Billy Crutchfield at Lonoke to discuss performance of current guns on hand at Lonoke and to arrange to have ported guns delivered to Lonoke for use. Steve to update Team at March PTM.

2004 New Shotgun Product

- General New Product Discussion

OBJECTIVE: Ship new product on time

ACTION: Ilion to provide status of any 2004 new shotgun products that have not been released in production yet. From my notes, these products are:

- 9583 – M1100 Sporting 28/27
T&P scheduled for Feb. Production May.
- 9549 – M1100 Sporting 410/27
- T&P scheduled for Feb

**ACTION: Engineering to insure gun reliably cycles both 2 ½" and 3" shells
Scheduled same as 28 GA**

ACTION: Manufacturing to advise current T&P status and production date.

- 6457 – M870 SPS FR/CL 20 GA
T&P scheduled to begin 2/6 with production in April.

- Waiting on new guide rings
- Barrel incorporates new optimized rifling
- Every 20 gauge except 1100 now has 3" chamber

ACTION: Manufacturing to advise current T&P status and production date.

- 4455 – M1100 Sporting XBL 28/27

Schedule concurrent with gun.

ACTION: Manufacturing to advise current T&P status and production date.

2005 New Shotgun Product

- 2005 New Shotgun Product

OBJECTIVE: New Product

ACTION: Discussion of prospective new shotgun programs and strategies for 2005.

M870 EXP .410 slug gun. Findlay working up quotes for sights. NPP-2004-35

- \$47K for sight tooling
- 10 prototypes being built
- Engineering will continue to develop

M332 Sporting

M332 Trap

- Production-Are barrels longer than 30" an issue?
- Can we do raised side panels?
- Engineering-We must figure out shooting open issue
- **ACTION: Engineering-Figure out what it will require to produce 32" and 34" barrels as well as raised side panels**
- **ACTION: Fink-Provide clear written NPP with direction**
- **OBJECTIVE: Announce Target models on 2005 Spring Gun Program**

M332 Small Gauge

- Small frame 20 gauge
- Frame to accommodate 16 gauge barrels
- Stock dimensions-trimmed down version of 12 gauge
- 26" and 28" Barrels
- Steve Perniciaro and Dave Findlay have drawings
- Need to examine ways to build low volume items efficiently
- Investment cast-brings some new issues and solves others
- Have to improve cost, efficiency and quality
- **OBJECTIVE: To announce 20 gauge M332 on 2006 Spring Gun Program**

Ilion Quality – Shotguns

- Shotgun POI
OBJECTIVE: Conformance to SAAMI spec
ACTION: **Ilion to provide status of this project. 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-10Findlay presented prototype of proposed new rib design to bring our POI in line with SAAMI.
ACTION: **Ilion to test in January and report on results of testing at March PTM.**
Need samples shipped to Madison to evaluate.
 - 12 gauge 870, 1100, 1187 SAAMI sight picture 3.27" low. Remington sight picture .90" High
 - Raised POI 3"-4"
 - M332 shoots to SAAMI sight picture
 - Tooling & Gauging to be complete by June 2004
 - T&P Scheduled September 2004 for 870/1187ACTION: **12 gauge 1187 standard contour barrels shipped to J. Fink for Marketing evaluation and report at March PTM**
- 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 and timeline for implementation. What testing needs to be done and when can we expect to make the transition in production?**
Findlay presented new gas collar design to give a better seal.
 - (10) 12 gauge barrels in test with new design
 - Objective to reduce 3" & 3 1/2" terminal velocities and improve function
 - Testing to be completed by 2-15-04
 - MIM gas cylinder prototype 10 weeks and \$15K
 - 30 piece 12 gauge machined sample to transmit April 30, 2004ACTION: **Report on test status**
- Choke Tube Constriction/Patterning Concerns
OBJECTIVE: Conformance to SAAMI spec/product enhancement.
Testing with the M1100 Tournament Skeet 20 GA showed that we had a problem with the extended choke tubes patterning too tight. This has sparked discussion of a full scale audit of all of our 12 and 20 GA choke tubes to verify patterns are correct. Findlay has proposed drawing changes that will be confirmed through a test plan.
ACTION: **Review test results at January PTM.**
Corrective action date-
New Tube Identification-Need some sort of symbol or marking to differentiate new tubes from older tubes.
 - Complete shooting of 12/20/28 gauge extended Briley tubes by end of February
 - Old fixed skeet was "bow tie" configuration all others tapered to .5" flat; why?ACTION: **Pursue making tubes meet SAAMI specs. Gain an understanding of old fixed choke dimensions and performance. Get hardcopy of specs to J. Fink and J. Bunting**

- Surface Finishes on Internal Components
OBJECTIVE: Product enhancement
Action: Fink to lead discussion with examples on current concerns from Marketing on surface finish of components.

ILION BASED GENERAL TOPICS

- Elimination of ISS on common fire control and Model 700, Model 7
ACTION: Establish final plan forward for ISS.
 - Conversion to be complete no later than 1.1.05
 - Design transmittal of Regal trigger block for all common fire controls from D. Diaz by end of February to S. Perniciaro and D. Findlay
 - Audit current CA DOJ designs
 - Trigger block must allow M7400 to lock bolt open
 - Block must not mar gun or fire control
 - Regal needs conditional PO by Mid-March
 - 2 months delivery from receipt of PO and \$2.95 cost each
 - Regal will have block tested by CA DOJ by 6.15.04
 - With DOJ approval, all common fire controls converted by 1.1.05
 - M700/M7 to cable lock-\$1.63 cost
- R3 Pad on Wood Stocks
OBJECTIVE: Product enhancement
ACTION: Ilion to confirm roll-in to begin Q2 and establish timeline by model.
 - Waiting of norbides from S&K
 - No RAMAC change
 - Start implementation in February 2004
 ACTION: Matrix of products to J. Trull and J. Fink from Engineering. R3 Label on 5 pack for identification.
 - Will be cataloged in 2005
- Styrofoam Insert in Gun Boxes
OBJECTIVE: Product enhancement
ACTION: Update team on progress.
 - Two new vendors given drawings
 ACTION: Make sure trigger block will fit into new insert
- Dimensional Audit
OBJECTIVE: Quality Control
Action: Marketing requests that Ilion conduct a dimensional audit of weights and dimensions of current catalog items to allow Marketing to cross check against catalog.

ILION BASED RIFLE PRODUCTS

2004 New Rifles

- Model 700 CDL (Classic Deluxe)
NPP-2004-24 RAMACS (7007, 7015, 7011, 7017, 7047, 7049, 7051, 7053)
OBJECTIVE: New Product
Action: Production Status from Ilion
ACTION: WE MUST SHIP CDL'S IN THE FIRST QUARTER!

- Model Seven Synthetic Stock
OBJECTIVE: New Product
ACTION: Samples to Trull at SHOT, determined to go with Polypropylene gray stock. Texturing not great, but will leave as is for now. Marketing direction to proceed with production.
ACTION: Ilion to update on production status
- Model 700 204 Ruger
OBJECTIVE: New Product
NPP-2004-36, 37,38 RAMACS 6196 (LV SF), 7487 (VLS), 7527 (ADL SYN)
Current on order status is 3,585 pieces (1376- ADL, 1224-VLS, 985- LV SF)
ACTION: Test and Production Status from Ilion

2005 Prospective Ilion New Rifle Programs

- 2005 New Products
 - **Model 700 Syn Stock Redesign Status**
 - Need sample stocks by Sept. 30, 2004
 - May have vendor that will furnish mold to get our business
 - **ACTION: D. Diaz to provide design at PTM**
 - M700 LV-Custom Foam \$30 savings v. Bell & Carlson
 - Pillar bedded, steel reinforced
 - Weight currently with in ounces of B&C stock, can change weight
 - **ACTION: Communicate desire to pursue to purchasing**
 - Model 700 Special Purpose Synthetic – Trull to issue NPP prior to Meeting.
 - Must compete with Tikka and Vanguard
 - Update to Varmint Line – Review/discuss new concepts. Review McMillan stock designs
ACTION: D. Diaz to check intellectual property concerning bedding block in HS Precision stocks
Trull having discussions with H.S. Precision now on how to update the line. It is going to be a difficult sell to steer the market away from the H.S. stock after we have done such a thorough job convincing the market on how great it is. Committing resources to design around it may be an inefficient use of our resources.
- Model 700 Classic thoughts – Any Ideas? 35 Remington?
 - Despite 1979 catalog-308 Win has never been done
Action: Trull to proceed with .308 Win unless Ilion has discovered new information indicating that it has already been done.
- Ultimate Firearms Muzzleloader – Samples received. Need to review and address path forward
- 700ML Concept
 - Improves 209 Primer ignition
 - Interchangeable barrel that eliminates blow-back
 - Sample to present to customers at SHOT Show
ACTION: J. Trull to report on customer response and plan forward

Ilion Engineering Topics – Rifles

- **Alternative Metal Finish for Stainless Rifles**
OBJECTIVE: Product Enhancement
Titanium Carbide-Hardest >RC90-\$50
Zirconium Carbide <RC90-\$29
Will get samples to test & shoot
ACTION: Marketing to provide direction on color-black or silver. Engineering to have samples and testing started by next meeting.
- **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 update on status. Can we implement on 7400/7600's?

Ilion Quality Issues – Rifles

- **Bolt-Action Rifle "Lays Left" Issue**
OBJECTIVE: Quality Issue
Action: Engineering and Quality to Provide a brief overview of implementation of corrective action on issues uncovered by team.
- **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: M700/7 Trigger Pull- Set pull at final assembly to 4 ½ to 5 ½ pounds. Ilion engineering to report on implementation at final assembly.
Action: D. Diaz to evaluate fluted firing pin and report status at next meeting.
- **Model 7400 Improvement Project**
OBJECTIVE: Quality Issue
ACTION: Trull must have information to present to customers at IWA. Primarily, what we are doing, why we are doing it and when we will see the changes. Also, how to handle the 150-200 35 Whelen guns that Borchers has in their possession.
- **Bolt-Action Rifle Torque Settings at Final Assembly**
OBJECTIVE: Quality Issue
ACTION: Manufacturing to confirm that processes have been changed at final assembly.
 - Manufacturing fine tuning processAction: Ilion to confirm that all controls are in place by March PTM.

R&D TOPICS

E-Town Development Topics

- **Model 597 Performance Improvement**
OBJECTIVE: Performance Improvement of 597
Action: **Diaz to advise of redesign efforts.**
 - Different magazine springs & box designs being evaluated
 - Should start shooting new boxes week of 2/2
 - Three different boxes .070", .120", .140"ACTION: **Get boxes to J Trull once we have redesigned box**
- **17 Hornady Mach 2 Project**
OBJECTIVE: New Product
Action: **Discuss M504 strategy and M597 strategy for this new cartridge. Need to have shippable product in the warehouse in September this year.**
- **Model 332 Small Gauge**
OBJECTIVE: New Product
Action: **Diaz to update on design status. Is 2006 new product likely?**
- **6.8mm Rem SPC Cartridge**
OBJECTIVE: New Product
Action: **Diaz & Perniciaro to address expense and timing involved to implement on 700 LTR and Model Seven**
- **Model 7600 223 Remington**
OBJECTIVE: New Product
Action: **Diaz to update on DAT status. Guns were received from Ilion. Advise of anticipated completion date.**
Colt magazine box to E'Town
Issues with stem low
Modified insert by 5°, 400 rounds with no issues
Colt is standard but supply is extremely tight
Action: **R&D to give status**
- **C.A.R. (Centerfire Autoloading Rifle)**
OBJECTIVE: New product
Action: **Discuss concept and timing**
- **N.B.A.R. (New Bolt-Action Rifle)**
OBJECTIVE: New Product (Long term)
Action: **Discuss strategy & timing**

MAYFIELD BASED RIFLE PRODUCTS

2004 New Rifle Product – Mayfield

- Model 504
OBJECTIVE: New Product
Action: **Golemboski to advise of production status.**
Problem encountered with left extractor creating a burr in the barrel due to hitting the extractor cut. Will I.D. the problem and correct within one week. Otherwise, production is coming up to speed.
Action: **Will continue to follow at subsequent PTM's.**
- Model 710 Magnum
OBJECTIVE: New Product
Action: **Review status of T&P and build plan.**
Continuing to struggle with riveted extractors.
Action: **Samples at E-Town to test week of 2/16/04**
Status needed prior to next PTM

2005 New Rifle Product – Mayfield

- Model 504-T LS HB
OBJECTIVE: New Product
NPP-2005-03 RAMAC's TBD
Line Extensions to M504 line in 22LR and 17HMR target versions.
Action: **Discuss concepts and clarify any issues**
Manufacturing and R&D understand the guidelines by Marketing.
Action: **Will review stock prototype at SHOT from Boyd's. Will continue to monitor at next PTM.**
- Model 710 Steel Receiver
OBJECTIVE: Product Enhancement
Early 2004 indicators suggest that "sprucing up" the line in 2005 will be needed.
Action: **Discuss path forward**
Action: **Team agreed to focus on this after 710 Magnums get into production.**
- Model 710 Short Action
OBJECTIVE: New Product
Action: **Discuss plan of action to introduce .243 Win caliber in M710. True short action vs. using current action.**
Team agreed that if we can make the all steel extruded receiver work, a true short action is a viable product option. Possibly for 2005 if we can get the magnums behind us.