

**REMINGTON ARMS COMPANY, INC.**  
**Product Team Meeting Agenda**

November 17th, 2004 7:30 am EST - Ilion

**Future Meetings**

December 15<sup>th</sup> - Ilion

**Future Important Dates**

January 28<sup>th</sup> – 31st                      SHOT Show – Las Vegas, NV  
April 15<sup>th</sup> -17th                              NRA Show – Houston, TX

**Business Review**

Jay Bunting to provide overview of current business environment

**ILION BASED SHOTGUN PRODUCTS**

**New Shotgun Product**

**Model 332-Skinner, Orf**

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

Production Status:

- Shooting Open-Update  
    Top Lever Template  
    Grinding Lugs  
    Communicating with Arms Service-Any New Repairs?

Action: Look at improving efficiencies and cost. (Orf)

ACTION: B Orf -M332 Camp-Need to have (2) 26" bbl guns & (2) 28" bbl guns dipped in New Mossy Oak Break-Up and (1) 30" bbl gun in New Shadowgrass by Mid-December 2004. These guns will be displayed in the main meeting room at the SHOT Show to gauge customer interest.

Three guns returned to Arms Service since last meeting; one gun with bulge in bottom barrel, one with loose fore end and top barrel not firing, third gun was replaced and not fit properly.

Stopped building; will have about 400 guns at year end

**M332 Sporting DL - D.Diaz**

**Need 10K rounds shot through 3 guns to assess durability of design. Need to look at frame treatment. R. Murphy to work with B. Orf on improving design. Must have design complete and finalized by June 1, 2005 for a 2006 Spring Gun introduction.**

- Current Status  
    3200 style barrel hanger-Designed barrel hanger set, .040" convergance. Plans to braze 3-5 barrel sets week of 7.21. Barrels will be crowned but not tubed and shot for POI.  
    Side Panels-Update  
    5 prototype barrels with .040" versus .120" convergance built. Will ship to R. Murphy week of 8.23. Not overbored or choked, will shoot for POI/POA. Need to go to a light contour barrel, 28" 30" 32" 34" barrels, tapered rib, stepped rib, straight comb. Current design has bottom barrel 1" higher than top barrel. Need taper of approximately .014" like 3200. Barrels would be straight allowing tube sets to work.  
    Barrels went together well, less labor

DAT complete first week of December. T&P-barrels should not be an issue. Biggest issue is raised side panels.

Action: Make sure all future drawings/communications are funneled through Orf. (Diaz/Murphy)

Action: Checkering patterns are an option that need addressed. (Fink) Decision to stay with flat side panels.

Week of 12/6 with new mid-hanger, rib, and muzzle hanger. 11mm-8mm stepped rib. DAT complete beginning of February.

#### M332 20 gauge-2006 New Product Introduction

- Current Status-Diaz

Randy assembling parts that were designed by B. Howard; just now resuming work.

#### M1100 Sporting DL-B. Orf

- Current Status-Make 1100 bbl with 105 ID and choke tubes, .735" with lengthened forcing cones. Goal is to have 10 barrels by September 1<sup>st</sup>. Boyds should make adjustable comb stock

Target sights

Glass beaded/shot blasted receiver

ACTION: Jeweling bolt-need to investigate bolt cosmetics. Fluting was proposed as an option. B. Orf to look into what is feasible.

Investigating ways to improve surface finish: action bars, slide, action tube, receiver with nickel Teflon finish. Polish hammer, locking block, action spring tube follower, link and hammer plunger with coating. Will have shooting prototypes by the end of September.

Action: Fink contact Kolar to have 5 adjustable comb stocks made from 1100 Sporting stocks.

Bolt-have not come up with option for jewelling or fluting. Body cote may be an option for the bolt.

Assuming cosmetics finalized by mid September, production could start end of first quarter.

Need-new cosmetics; different receiver look, new for end and checkering pattern

ACTION: Fink to supply artistic rendering for benchmark.

NEED competitive review; bring guns to next meeting.

Work with Hogue on grips-Fink to get rendering to Orf to develop.

Orf-Bolt velocities not affected by nickel Teflon finish. Need more rounds on gun then check bolt velocities. Work with G. Sietsema on ways to provide a matte black top radius.

Fink-finalize checkering pattern.

#### 1187 Super Magnum

Need definition on lower end of ammunition.

Action: Fink to check Owners Manual on recommendation/catalog copy/customer and consumer service/website

Owners Manual-1 1/8 oz - 3 Dram, Website-Most 2 3/4" Shells, Consumer-1 1/4 oz 3 1/4 Dram

ACTION: B Orf to check D. Findlay research concerning low end recommendation.

ACTION: Gallery test with 3 dram 1 1/8oz-Fink to work with CSR's and Nickerson.

#### 2005 Spring Shotguns-Skinner, Mroz, Orf

- Current Status

2005-06 SP-10 Mossy Oak Obsession October production-400 by year end

2005-07 11-87 SM NWTF-Royalties 1500 by year end Inventory at year end a concern, to date orders are less than 500 guns

2005-08 870 SM Thumbhole 850 by year end, 50 by the end of September

1<sup>st</sup> 8 stocks from Boyds have rough spots. Some issues with Boyds and their ability to supply. Added lock washer.

2005-09 870 Exp Jr. NWTF-Royalties 750 by year end  
925 Team NWTF guns in October

#### 1187 Sportsman Synthetic Line -

Update \$37K total in stranded parts, \$11K is recoil pads that can be used.

ACTION: Skinner-12 gauge production schedule- 12 gauges are structured with schedules starting in October for 12/26&28 and 12/21 FR CL.

ACTION: B. Orf - 20 gauge fore end status. 9 weeks & \$15K to modify 1100 20 gauge tool. Sample for ends first week of November. Scheduled to start in December. Good inventory of all three 12 gauge guns  
Will start 20 gauge guns week of November 22nd.

#### 2005 SHOT Show Specials

- NPP 2005-28 870 SP TH FR CL RAMAC 25005
  - Will receive wood for three guns and components for three guns next week.
- M 11-87 Premier with Wood Extra-Need Cost, Logistics, etc
  - Orf working with supplier of wood. Expressed concerns.
  - Project has been tabled 12.1.04 due to logistical problems with Italian wood decorator.
- 870 FRCL Extra Barrel with Scope Mounted and Bore Sighted
  - Trull has contact for clam pack contact for tool.
    - Fink/Trull met with clam pack vendor 11.24. Quote being supplied. Working with logistics regarding packaging ammunition and an extra barrel together.
  - 2<sup>nd</sup> XBL for SHOT-12.18 CYL BS

#### 2006 870 Express Line

- New cosmetics for Express Line (Fink)  
Black synthetic stock and fore end with overmolded inserts  
ACTION: Fink to write proposal  
Youth guns with redesigned fore end  
Potential laminated wood stocks with inserts-need cost and volume commitment from Boyds  
Camo guns changing to Mossy Oak Pattern-Most likely Break-Up

#### 870 Slug Gun

Will have gun for Dicks meeting 12.2. Scope mounted directly on receiver.

#### Ilion Quality – Shotguns

##### M1100 Sporting 28's (Orf)

Report on testing from Writers Seminar Guns and guns pulled from the warehouse.

##### M1187 Sportsman 12 gauge 28"

- (1) Gun with bad interceptor latch-will double feed with full mag tube
- (1) Gun that extractor fell out
- (1) Slug gun rough opening & closing; would not feed reliably or lock open reliably

##### Shotgun POI-*Perniciaro*, Orf

OBJECTIVE: Conformance to SAAMI spec

ACTION: Ilion Engineering 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-10

Jack Kast has picked up. Trying smaller bead to evaluate POI. Lab time is being consumed for MCS at this point of time. Late July early August at this point for an answer. **By next PTM we should have results.**

**Standard rib and sight SAAMI- -3 1/8"**

**Standard rib and low sight SAAMI- +1/2"**

**Assuming low bead works, change all beads ASAP.**

**Change to small bead sight to be done as an in line change.**

- **Choke Tube Constriction/Patterning Concerns Drawings changed-Need ID Mark**  
ACTION: B Orf to update drawings. Need to add some sort of ID mark on choke tubes.  
B. Orf-Need to add ID mark.
- **1187 extractor is being used in 1100 Target guns. This means old 1100 barrels will not fit new 1100's.**  
ACTION: Perniciaro to investigate when change took place, report at next meeting, and provide plan to revert to an 1100 extractor.  
Update Report-1986 DCR by Terry Douglas to change all 11-87 and 1100 (12&16ga) barrels to wide cut.  
1100 Classic Field 16 gauge '02-wide cut and extractor  
1100 Syn (2005 Deletion) has narrow extractor but wide barrel cut.

**Moving forward-all 1100/1187 12&16 ga to have wide extractor and wide barrel cut.**

## **ILION BASED GENERAL TOPICS**

### **Fore End Stickers for Wal\*Mart - Mroz**

- Current Status
- Implementation Dates
- BOM Updated and Structured?
- RAMACS by Model  
7400-9794, 9796  
870-5102, 5587  
700-7512, 7474, 7478, 7480, 7514, 7476, 7516, 7482

Fore End hanger being developed. Will replace sticker that has been developed. Artwork to be provided by Al Russo.

### **R3 Pad on Wood Stocks-B. Orf**

- Current status and implementation dates.
- 1<sup>st</sup> T&P on 700 magnum received 8.22. will submit CAR for white line spacer. Continuing to work on short stocks. Ed Owens is handling, will be at S&K at least one week per month.
- Currently working on 1100 Upland Special, Mountain Rifle.
- Will have 50 Wingmaster stocks within the next week.

Spacer in place for BDL magnum. Waiting of nobides; should be in by end of November; 700 BDL Magnums, M7, Wingmaster, 700 Mountain rifle(changing program), Some issues with Boyds and CDL R3 fit.

### **Wood Stocks Dipped with Wood Pattern – B. Orf**

- Develop contacts to test market an 1187-Need to see some samples, may do a SHOT Show special.

**ACTION: B. Orf to get contact information from S. Perniciaro and have some stocks dipped for samples.**

**Update for next meeting. Project has been tabled 12.1.04 due to logistical issues**

#### **Botega Equipment – B. Orf**

- Discuss Path Forward
- Marketing needs sample set of all rolls on hand to evaluate if any on hand are usable
- Action: Joe P. have steel plates rolled to show examples of what we have available.

#### **NRA Licensed Guns**

1187 Sportsman

870 Wingmaster

700 SPS

552 with fine line engraving.

Need Mike LeMay to work with Botega to get NRA completed ASAP

Need to know what we have now and what is needed to build new rolls in the future.

**Have NRA guns to preview to customers and launch at NRA**

**Action: Fink/Trull to complete NPP's.**

### **ILION BASED WAL MART STRATEGY**

**Bunting Trull to recap strategy session with Wal Mart buyer.**

#### **Products**

- 870 Express SMAG Camo (Realtree Hdws 20-200) – **Fink**
- 1187 Sportsman Camo (Mossy Oak New Breakup) – **Fink**
- 700 ADL SYN Camo (Realtree Hdws HD) - **Trull**

### **ILION BASED RIFLE PRODUCTS**

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

##### **Model 700 Synthetic Stock Redesign Status–Mead**

- Status Update on vendor progress
- Status update on production plans **Ballo**
- **Cold flow wrap on mold. Short Action, Long Action, Long Action Magnum will be ready 11.17 assuming mold is corrected. Will have camo cosmetic stock by Friday 11.19. 800 Long Action that could be camoed. Long Action Magnum has passed dimensionally. Long Action and Short Action to be checked dimensionally. Plans to start XCR by first week of December.**

##### **Custom Foam – RIM Stock for 700 LV SF**

**New Light Varmint stock-can spray elastomer in mold. Very durable. Can color. Could be good option for adjustable comb.**

**Action: Trull to schedule meeting in E'Town to discuss path forward for HS replacement. Density of foam lowered to hit B&C stock weight. Will have to adjust density to increase rigidity. Minimal painting capability. Need paint color combinations from J Trull.**

**Mroz:Need pull test on swivel studs.**

##### **Model 700 XCR –TriNyte Coating–G. Sietsema**

- Need an update on DAT/T&P to establish material flow process with vendor.
- Need an update on competitive samples to independent test lab that we agreed to go ahead and get started per the last meeting.

- Intellectual property – have we filed provisionals?
- What are lead times?
- What is final costing of TriNyte coating?
- Not completely structured in SAP, cost, etc.
- December 6<sup>th</sup> for outside testing on salt fog. 4 day test. Coordinate with Brothers Agency for catalog type photography.
- Need to get provisional patent in place. G. Sietsema/ S Perniciaro
- Beretta is pursuing/may have purchased equipment in place to PVD coat shotguns.
- T&P scheduled for 1<sup>st</sup> week of January. Production scheduled in March; 300 Win Mag and 338 Win Mag in March.
- Long lead times for PVD process. Barrels for March would have to start in December.
- Forward contact info to Sietsema for Embedit. Develop salesman sample sets. Get Custom shop involved with process for AWR.

#### **Model XR-100-Mroz**

- Status Update on Gun – DAT, T&P, etc.
- Status Update on Owners Manual – Has copy been signed off on by Dale Wills?
- Had a number of issues with failing to eject spent cases on 204 Ruger. Need to address on this gun as well as M700's/Seven line

Approving stock with exception of clearance cut for safety. Being modified and will start manufacturing stocks. Concern expressed regarding failure to eject spent round. J Trull to ship gun from Sales Meeting that exhibited problem. Will start building in January. Production transmittal scheduled for May 17<sup>th</sup>.

#### **Model 700 SPL Fire Control – Perniciaro/Diaz**

- Update on testing/timing. – Perniciaro

#### **6.8mm Rem SPC Bolt Head/Extractor Development – Perniciaro/Diaz**

- Status of M700P LTR
- Timing/Cost of Development
- Model Selection/Strategy – Keep it Lean
- Bolt heads on order.
- Potential SHOT Show special, 700 Tactical

#### **Ilion Quality Issues – Rifles**

#### **Model 7400 Cracked Fore Ends - S. Perniciaro/Ballo**

- Ilion to advise of status of replacement fore ends for Rivolier.
- 7500 in production today, have new fore end
- Replacements have been shipped to Rivolier

#### **Model 700 Fail to Eject Small Cases – S. Perniciaro**

- Had a number of issues at Writer's/Sales Meeting with XR-100 failing to eject spent cases on 204 Ruger. Seems to be a common occurrence on small cartridges
- How do we address this?

#### **Model 700/Seven Short Mag and Ultra Mag Magazine Capacities – S. Perniciaro/ C. Shoemaker**

- Ilion to confirm that all BDL/CDL/SPS/XCR/Seven Magnum magazines are capable of holding 3 Ultra Mag or Short Magnum cartridges.
- We had addressed this back at the beginning of the year, and need to confirm before we launch the new line that we have this totally under control.
- Issue with some followers that are not correct, two different height legs. Double check to make sure this is not an issue on new products coming out.

### **Model 700 Varmint Accuracy Standards - S. Perniciaro**

- We need to establish a protocol to insure that our varmint rifles meet a level of accuracy that is congruent with the consumers perception that a varmint rifle should be capable of delivering sub-MOA accuracy out of the box.
- We already charge more for these guns, but we can likely get an additional premium if we can guarantee a level of performance.
- We need to firm up our future business of high revenue, high margin products and give the consumer "insurance" in the form of a guarantee that they are justified in paying the premium for a varmint rifle vs. a price point rifle.
- We need to control trigger pull weights on the SPL fire control to 3 -3.5 lbs max, guarantee that the rifle shoots MOA or better and include a target in the box with the gun for 2006. Shooting 100% on five different skus, 80% under 1" for three shot groups. Marketing would like to guarantee accuracy in 2006 while going away from HS stock. Will start 2006 varmint run in August of 2005.

### **7400 SGS-New gas system – S. Perniciaro**

- Perniciaro to update on status.
- Team to decide if we should push forward.

Sietsema-Tested 30-06 in test lab, 1000 rounds in endurance with 2% overall malfunction rate. Will have 35 Whelan tested by the end of December. 80% of tooling will be in place by year end. Viewed as a low risk development. Needs new model number and new look. Make high end gun, high end wood with new dimensions. Changes made here carry over to new pump action look. 2006 Catalog introduction. J Trull to submit NPP's. Look at making trigger feel more like rifle trigger. Look at burnishing chambers.

### **2006 New Rifle Products**

#### **New Model 700 Varmint Line**

- Utilizes standards set forth above with respect to accuracy and trigger pull
- Will utilize SPL firecontrol
- Will utilize new stock design outlined at recent E-Town meeting on this subject
- Discussions around how we will achieve our goals on accuracy
- Discussions around styling and cosmetics, i.e. carbon receiver with stainless barrel
- R&D-Stock design from Todd Cooke

#### **Update Model Seven Wood Line for 2006**

- New styling i.e. CDL style? General discussion
- Wood strategy discussion S&K, Boyds, other supplier?
- Lead time discussion and design lead discussion.

#### **Model 7 line has been unchanged for 6-7 years**

Spline cut recoil pad could differentiate the magnum from the non-magnum

If Boyds will switch to ¼ sawn at same price, then make switch. Must check with S&K on holding price. May switch to S&K for Magnums in summer 2005.

### **R&D TOPICS**

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

##### **New Varmint Stock Design - Diaz/Mead/Mroz**

- Brief discussion on laying out preliminary design criteria
- Establish time for Trull, Mead, Mroz to travel to E-Town to meet with CAD group.
- Where is Cooke on design?

##### **17. Hornady Mach 2 Project – Diaz/Lance**

- Status on 504 accuracy testing
- Status on 597

**NCAR – (New Centerfire Autoloading Rifle) – Diaz**

- Status on Design
- Is there budget capital for development that has been approved?
- Design complete, parts out for prototype, should have parts by mid December.

**Mayfield Topics**

**Model 710 Metal Receiver – Diaz/Lance**

- T&P Update
- Timing for Implementation
- Must be warehousing product prior to first of year.

**Model 504-T LS HB – Diaz/Lance/Trull**

- Confirm Testing schedule is on track
- Production plans
- Accuracy Standards

**Model 504 Stock Improvements – Lance**

- ¼ Sawn lumber implementation
- Wrap around fore end checkering
- Supplier plans (Boyd's vs. S&K)

**Model 504 Accuracy Standards – Lance/Vicars**

- What is path forward to achieve goals discussed with Marketing on accuracy?
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**Model 710 Short Action - Diaz**

- Trull discussed plans for 2006 (fall 2005 roll out) of 710 Short Action
- Includes .243 Win, 7mm-08 or .308
- True Short Action Length
- New Stock will allow for youth version
- Marketing can commit to 10k units
- Diaz to update with design status

**Model 597 17 HMR Accuracy in Production - Lance**

- Current production status

**Model 597 (6550) Cost Reduction – Lance/Vicars**

- Trull has challenged plant and R&D to take \$10 cost out of the current 6550.
- Synthetic box with Vince's changes?
- Sight options?
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**Military/Law Enforcement**

**870 MCS Status Update**

- Israeli 120 day order with 10" bbl and threaded muzzle break choke tube, would not work. Need direction from Schoppman and Foster.

- Airforce order pending for 1150 guns.

Trasmittal next week from R&D.

7615-Status Update – Perniciaro/Diaz 100 Piece T&P in December. Testing in January, once testing complete start ordering parts. 200 scheduled in February with 4050 by end of June, 6000 scheduled between July and December.