# REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

xc: File-Development Schedule

Remington QUIVUD)

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"\_\_\_

November 9, 1984

TO: W.H. Coleman, II

FROM: J.W. Bower,

UPDATE - DEVELOPMENT SCHEDULE ITEMS

## Model 1100 Functional Improvements (1986)

Research is evaluating four improvements - in order of priority:

- a. automatically compensating gas system
- b. improved action smoothness
- c. new carriers
  - d. stainless steel magazine tube.

Preliminary testing of a leaf spring - pressure vent gas system is very encouraging. Average terminal bolt velocities ranged from 178 in./sec with 1-oz. target loads to 295 in./sec with 3" magnums. This spread of 117 in./sec is well within our goal of 200 in./sec. We anticipate that fine tuning can produce further improvements.

An engineering test of the new carriers, stainless steel magazine tubes, and design changes to improve action smoothness, including cam angle changes on the disconnector and feed latch, will begin November 26.

# Model 1100 Restyle (1986)

Research and Marketing agreed to final specifications on August 30. Research has transmitted these specifications to Production for estimating.

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### New Concept Autoloading Shotgun (TBD)

The Research objective of the New Concept Shotgun (NCS) program is to develop a competitively priced autoloading shotgun that will set the industry standard for safety, performance, and reliability.

A research plan has been developed. Engineers from Remington Research, Du Pont Engineering Department, and outside consultant PDS have been assigned.

### 4. Anti-Jam Mechanism for the M/870 (1985)

A fail-to-eject will occur in approximately 30% of those rare cases where a shell prematurely feeds out of the magazine onto the flexi-tab carrier. To overcome this, an additional clearance slot will be formed in the carrier. Samples have been started by the carrier vendor.

# 5. Sportsman 12 A

Research has completed their evaluation of Production's trial and pilot sample with satisfactory results. Production has been released to warehouse guns. This item will be dropped from the development schedule.

### Choke Systems

Research has transmitted the design to Production for formal estimating.

The Remington choke system will be used in the Model 870 Restyle, now scheduled for a mid-1985 introduction. First year production of approximately 30,000 will be sourced.

### 7. M/16A2

Harvey Boyle will discuss.

# 8. Model 870 Restyle (1985-12 Ga., 1986-20, .410 Ga.)

For 1985, there will be three versions of the 12 Ga. M/870: Sportsman 12 Pump; current M/870 offering with pressed checkering, and for mid-year introduction, a restyled version

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Model 870 Restyle - cont'd.

to have cut checkering, a solid recoil pad, an ivory bead front sight, 30 gloss wood finish, and choke tubes in 26" barrels. The 20 gauge will be offered in similar specs for 1986. The 28 and .410 gauge offerings, also in 1986, will be the restyled version only, without choke tubes.

Research is working with Production and Planning to transmit the parts lists and drawings in the order that most fits their needs.

### 9. Mountain Rifle (1986)

The project has been approved. Research work is complete pending Production's trial and pilot run in 2085.

# 10. New Bolt Action Rifle (1988)

This rifle has been designed as replacement for the Model 700. Technical improvements include:

- a simplified fire control containing:
  - preset engagement and overtravel
  - customer adjustable trigger pull to a safe lower limit
  - steel trigger and sear
- a tang mounted safety that blocks both the trigger and sear
- a bolt lock which allows the customer to unload the gun with the safety on
- a fully enclosed claw-type extractor
- a fully enclosed bolt plug
- reduced lock time
- Remington scope mounts
- a detachable magazine box.

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#### 11. Parker Shotgun

Research is preparing a contract for Briley to complete the design and build of prototype Parker Shotguns.

Jim Martin is reviewing the Briley fire control and is working with Briley and Larry Del Grego on modifications.

A Product Development form is circulating for economics and the Business Team will present a recommendation regarding continued pursuit of the Parker program.

#### 12. Model 700 Classic - 350 Rem. Mag.

A marked-up parts list has been given to Production for estimating.

Research testing is required for:

- barrel strength (the barrel profile has been changed since the 350 was last produced)
- accuracy
- feeding malfunctions (the magazine follower has been changed since the 350 was last produced).

Production has been requested to start barrels. Magazine followers are available. Testing will be complete three weeks after receipt of barrels.

#### 13. International Over/Under

Phil Haskell will be retained as a contract engineer to evaluate this sourced product. A Product Development form is circulating for economics and Business Team review.

### TEXAS -Ducks Unlimited Sesquicentennial (1985-1986)

This item is held.

#### 15. Sportsman 78 - Two Short Action Calibers

Economics have been issued. Research has transmitted drawings and parts lists to Production.

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16. Model 1100 and Model 870 Special Purpose Magnum

The 870 Waterfowl trial and pilot sample was rejected. A new sample is due in December. Model 1100 Waterfowls are due in Research in November.

17. Model 7400/Four Functional Improvement Program

These models have had feeding and extraction problems since introduction. Testing of new magazines and extractors, to correct these problems, is in progress.

- 18. Ducks Unlimited (1100 Special Field and 700 BDL) 1985 Drawings have been transmitted to Production.
- 19, Sportsman 12P for Europe, and Sportsman 74 for Europe 20.

These programs have been placed on hold pending indications of a weakening of the U.S. dollar in Europe.

JWB:sps Attach.

# FIREARMS DEVELOPMENT SCHEDULE - SCHEDULE DATES

	Introduction	Introduction Date	
	Last Quarter	Current	
CRITICAL			
<ul> <li>Autoloading Shotguns</li> </ul>			
<ul> <li>Improved Quality and Gas System</li> </ul>	2Q85	1086	
- Short Term Restyle	1086	1Q86	
<ul> <li>New Generation Autoloader</li> </ul>	TBD	TBD	
• Model 870 Anti-Jam	3Q84	Complete	
• Sportsman 12 A	1Q85	1085	
• Choke Tube Systems			
- Limited Volume	4Q85	3Q85	
- Full Volume	1Q86	1086	
• M/16 A2	TBD	TBD	
IMPORTANT			
<ul> <li>Model 870 Restyle</li> </ul>			
- 12 Ga.	3Q85	3Q85	
- 20, 28, .410 Ga.	1086	1Q86	
Mountain Rifle	4Q85	1086	
New Bolt Action Rifle	TBD	1088	
MODERATELY IMPORTANT			
Parker Shotgun	TBD	TBD	
<ul> <li>Model 700 Classic 350 Mag.</li> </ul>	TBD	3Q85	
International Over/Under	1085	TBD	
• Ducks Unlimited Sesquicentennial	TBD	TBD	
Sportsman 78 Short Action Calibers	1085	1085	
<ul> <li>Model 1100 &amp; 870 Special Purpose Magnum</li> </ul>	1085	1Q85	
<ul> <li>Model 7400 Function</li> </ul>	Not Scheduled	1087	
<ul> <li>Ducks Unlimited (1100 Sp. Fld. &amp; 700 BDL)</li> </ul>	Not Scheduled	2Q85	
<ul> <li>Sportsman 12 P for Europe</li> </ul>	Not Scheduled.	TBD	
Sportsman 74 for Europe	Not Scheduled	TBD	