**BARBER - PRESALE R 0114856** 

Jouvel Schustin

REMINGTON ARMS COMPANY, INC. RESEARCH AND DEVELOPMENT - FIREARMS FOURTH QUARTER PROGRESS REPORT - 1983

LIMITED DISTRIBUTION

DECEMBER 19, 1983

# Distribution List:

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#### HIGHLIGHTS

SHOTG	IN DEVELOPMENT	Page
•	Tooling and part fabrication for the elastomer buffer fore-end design, for the Model 1100 Special Field 12 Gauge shotgun, is on schedule.	3
٠	Research has approved the Model 870 - 12 Gauge Special Field trial and pilot production guns.	3
•	Drawings and parts list for the 12 Gauge Model 870 Restyle are ready for transmittal.	3
٠	Research testing of prototype Models 870 and 1100 Deer Guns will be complete in January.	3
٠	Research testing of prototypes Models 870 and 1100 Waterfowl Guns is scheduled to be completed by the end of January.	4
•	Testing of Briley choke tubes should be complete by February 15.	4 ÷
RIFLE	DEVELOPMENT	
•	Model 700 Mountain Rifle stocks are nearing completion. Accuracy testing will take two weeks.	4
•	Work on the New Bolt Action model guns is progressing.	4
٠	Sportsman 74 and 76 drawing packages and parts lists are complete and awaiting approval to transmit.	5
٠	Research testing of production trial and pilot Model Sevens is expected in early February.	5
CURREN	NT ARMS -	
•	A new design called the flexi-tab has been initiated. Prototypes have been made and testing looks satisfactory. Nine guns are now in the Test Lab for fired and endurance evaluation.	5
•	Design alterations to the Model 1100 are being considered to reduce the incidents of DLO.	6

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STATUS - SHOTGUN DEVELOPMENT	(D.	ş.	Findlay)
Model 1100 Special Field Shotgun	(Т.	P.	Powers)

The Model 1100 Special Field was developed to offer the shooter a lighter weight, faster pointing Model 1100, with a significant change in appearance to supplement the 1100 line. Features include a 21" barrel, a slimmed down and shortened fore-end, English-style stock, medium gloss finish, and cut checkering.

Tooling and part fabrication for the elastomer buffer fore-end design is on schedule. Trial and pilot samples should be available in January, with product expected to go to the Warehouse in March.

## Model 870 Special Field Shotgun (F. H. Smith)

This shotgun, due for introduction in 1984, has been developed to complement the Model 1100 Special Field, with similar appearance and performance features - 21" barrel, English stock, and cut  $\frac{4}{2}$ checkering.

Research has approved the 12 Ga. trial and pilot production guns. 20 Gauge components are moving through the production lines.

# Model 870 Restyle - 12 Ga. (J. L. Kast)

This 1985 gun is being developed to offer the shooter more quality appearance features. Specifications include a new fore-end, medium gloss finish, cut checkering, and 3" chambering.

Drawings and the parts list are complete and await Operations Committee approval for transmittal to the plant.

## Model 870-1100 Deer Guns (F. H. Smith)

The Models 870 and 1100 Deer Guns, for 1985 introduction, are being developed to offer shooters a specialized gun. Specifications include a redesigned 21" slug barrel with a new rear sight base (capable of mounting a long eye relief scope). It will also feature Parkerized and matted metal finishes, with an oil-finished, birch fore-end and stock. A camouflaged sling strap will also be provided.

Drawings and a parts list have been given to Production for cost estimating. Testing of Research samples will be complete in January.

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# Model 870-1100 Waterfowl Guns

(T. J. Plunkett)

These guns (1986 introduction) are being developed to offer Waterfowl shooters a specialized gun. They will complement the Deer Guns and have common features of Parkerized metal finishes, and oil finished brick stock and fore-end. Also included is a 30" full-choke, vent-rib barrel with chromed bore, and a camouflaged sling strap.

Prototype guns for test and Marketing evaluation have been assembled. Research testing is scheduled to be complete by January 30.

#### <u>Choke Tube Development</u> (T. P. Powers)

A choke tube system is being developed to offer shooters the convenience of a variable choke barrel to adapt to different hunting situations encountered in the field. The initial strategy is to for offer Briley choke tubes in mid-1984 and Remington tubes in 1986.

Testing of Briley's tube design is scheduled to be completed by February 15. Transmittal and approval is expected at the February Operations Committee meeting. The Remington design is to be tested by June 1984, with project approval and transmittal scheduled for August.

STATUS - RIFLE DEVELOPMENT	(R.	s.	Murphy)
Model 700 Mountain Rifle	(F.	E.	Martin)

The Mountain Rifle has been designed to deal with the higher end of the bolt action rifle line. It is scheduled for 1985 introduction as a replacement for the Model 700 Classic. Specifications include the lightweight Model Seven barrel contour, 30-06, 270, and 280 caliber offerings, and a new Bob Emmons style stock.

Stocks required for final accuracy testing have been completed by the Custom Shop and are being finished by Production. Accuracy testing will require approximately two weeks. Preliminary drawings have been given to Production for cost estimating.

New Bolt	Action Rifle	

(F. E. Martin, K. L. Calkins, R. H. Smith)

A new bolt action rifle is being developed as a replacement

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for the Model 700. A 1988 introduction is scheduled.

Model guns in three different configurations should be ready for review with Marketing by the end of May.

#### Sportsman 74/76 (A. R. Eddy)

These rifles are lower-priced versions of the Models 7400 and 7600, and continues the introduction of the Sportsman line of shotguns and rifles.

The drawing packages and parts lists are complete. Authorization to transmit is expected at the December Operations Committee meeting.

#### Model Seven Lightweight (R. S. Murphy)

The Model Seven is a short, lightweight, bolt action centerfire rifle developed to replace the Model 600, which was discontinued in 1969. Trial and pilot testing indicated that the steel trigger guard assembly was unsatisfactory. A cast aluminum trigger guard has been designed as an alternative.

Trial and pilot productions guns with aluminum trigger guards are scheduled for Research verification testing in early February.

<u>STATUS - CURRENT ARMS</u>	(J.	A.	Lawrence)
Model 870 P Riot Shotgun	(A.	A.	Hugick)

Occasionally a shotgun shell can jam between the carrier and the slide assembly making the Model 870 P shotgun very difficult to operate. Several design modifications have been developed to prevent the malfunction.

Research has come up with a new design called the flexi-tab design. It requires the breach bolt and slide to be modified and the carrier to have the center section modified to act as a spring loaded shell stop.

Prototypes have been made and the system works well. Nine Model 870 P Riot Guns have been assembled with the new flexi-tab system. Samples have been turned over to our Field Representatives to evaluate with the F.B.I., California Highway Patrol, etc.

The new design corrects the jam condition, satisfied the complaints about the assembly/disassembly, and can be retrofitted

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in the field. Testing for field function and endurance is underway. The vendor for the change on the carrier has been contacted and prototype production samples are scheduled for mid-January 1984.

## Model 1100 Performance with Premier Ammunition

The incident of "Don't Lock Open" is significantly higher with Premier ammunition compared with standard magnum loads. This is caused by the higher bolt velocities generated by Premier ammunition. Alterations to the Model 1100 Magnum are being considered which will more adequately handle this load.

Preliminary testing is focusing on reduced gas orifice diameter, and facing the front end of the action bar sleeve. The alteration to the action bar sleeve has the advantage of being more easily retrofitted. Tests are continuing.

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