

# LIMITED DISTRIBUTION

RESEARCH DEPARTMENT

HIGHLIGHTS REPORT

MAY 1981

## DISTRIBUTION

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NOTE: Please destroy this report when it has served your needs.

## FIREARMS

### XSG/XPG Shotguns

Four 3" magnums have been assembled and are currently being tested to verify the design. Eight additional magnum model guns and two skeet models will follow in mid-June.

### Model 979 Seismic Gun

An additional thirteen guns were shipped on May 15, bringing to twenty-five the total shipped to MAPCO this year.

Quotes have been received for component parts to enable Remington to build complete guns in 1982. Release of the orders for these parts is delayed pending resolution of a production forecast for 1982.

### Model 870 Competition Trap Shotgun

Dry cycle testing is continuing on fore-end tubes made of 1035 material and brazed to the action bars with a new brazing alloy. Three assemblies have reached 100,000 cycles.

### Bolt Action Carbine

Sample stocks have been furnished to the Measurements Lab and Fajan. Stocks for accuracy testing will be available by the end of May, and for field testing in July.

### Model 700 ADL/BDL Restyling

Costs have been requested from Industrial Engineering for several styling options.

### Model 1100 Ducks Unlimited

A commemorative model emblem has been received, and tested with satisfactory results. Production is preparing complete shotgun models for Trial and Pilot in June. Warehousing is scheduled in July.

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### Model 552 Rim Fire Rifle

A receiver assembly is being made with a permanently attached deflector at the ejection port.

### ASEA Manipulator

A fifteen-piece sample lot of 7400 receivers, polished completely with the ASEA manipulator, has been reviewed with Production. The conclusion of that review was that the top radius was acceptable, but some amount of additional polishing was necessary on the side panels and bottom radius. Additional parts will be rough and finish polished with the ASEA and touched up by hand to determine economics.

## AMMUNITION

### SHOTSHELL

#### New Unibody Shotgun Process

Over 30,000 new 12 ga. unibodies were successfully run through the Triplex AH&P in Bridgeport. Eight load specifications have been produced on the duplex loaders with good results, confirming component fits in the bodies.

Work to develop a deep skive has confirmed technical feasibility. Work to demonstrate extended run time on a duplex loader is in progress.

### Asbestos Elimination

New tooling for cutting 8 gauge plastic basewad slugs on the "Versacutter" machine has been installed and tested. Skewness of the cut slugs has been substantially reduced and is within acceptable limits for use at the AH&P operation.

### 21MM Seismic

Primers using No. 97 battery cups give more uniform ballistics than No. 111 battery cups, particularly when combined with reduced primer charge weights and tested at -20°F.

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## CENTER FIRE

### 7mm BR Rem Case

The trial and pilot run is through cutoff and head stamp. No major problems have been encountered.

### 357 Remington Maximum 158 Gr. SJHP

Two 1000-round test samples of machine loaded cartridges have been forwarded to Bridgeport and Ruger for evaluation.

## RIM FIRE

### "Scorpion" Rim Fire Cartridge

A 100-pound pre-production sample BS-184 Hercules powder was ordered and is presently undergoing ballistics evaluation at Hercules. Delivery is expected by the end of May after which ballistics and autoloader assessment of the powder will begin at Bridgeport.

## PRIMERS

### 117XA Primer

Testing has confirmed that significant improvements in pierced primer performance while retaining good sensitivity has been attained and the product is acceptable for field use. A quality control test is being developed for use at Lonoke.

### Integral Anvil Battery Cup

100,000 rounds of 12 gauge Promotional shotshells were forwarded to Ilion for gallery testing. This ammunition passed all sensitivity tests for Target primers.

### Rotary Cam - Equipment Status

System testing at EDL has started. Emergency stopping at full RPM was demonstrated to be smooth with no apparent shock load and well within the goal 30 degrees rotation.

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Auto 8 Gauge Packer

The mechanical system will be interfaced with the programmable controller and power panel for initial testing in June.

*Joseph P. Glas*

Joseph P. Glas, Director  
Research Department

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RESEARCH PERSONNEL

Remington Roll

	<u>4-30-81</u>	<u>5-31-81</u>	<u>Forecast</u> <u>12-31-81</u>
Exempt	64	64	61
Nonexempt	22	22*	22
Wage	20	20	20
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Total	106	106	103

\*Does not include 2 Summer Help (Ammo)

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