

"The next program down the list, load and pack optimization, is one where ER&D is providing development and design assistance to the Production Department. Existing loading and packing machines are being upgraded and assignments optimized for best cost performance. Also, a new 8 gauge packer has been developed. Essentially all engineering work will be completed on this program during the third quarter, this year. A very good cost reduction is expected.

"The printing program which resulted in successful development of both a new ink printer and improved shell handling system for retrofit to existing loaders, is ready for production application. The 1980 activity will provide the first three systems for use with the new Remington Target Load. This should be followed by expansion to other loads in 1981.

"The second to last program shown provides Machine Development support to scale up production facilities for electric primer manufacturing.

"The last program listed, paper-covered shotshell primer, will provide production prototype equipment for the Lonoke plant by year-end. It is probable that a similar system will be provided for Bridgeport.

"Chart XX shows two center fire and two rim fire programs, also in the Commitments category.

"Both center fire programs are part of a comprehensive center fire modernization plan. Under the first program, we will assist in prototyping a line of equipment to demonstrate plan feasibility. The next programs are a new development involving case and jacket manufacturing, and a rim fire specialty products equipment program.

"The last program shown, defect detection, is an application of technology developed under a machine signature analysis study. The activities in 1980 and 1981 will provide product quality monitoring instrumentation on all six high-speed autoloaders for a good cost reduction.

"Chart XXI shows two programs in the New Initiatives category.

"In the first program, we are participating with Du Pont Engineering Department groups in development of signature analysis techniques to help improve machine efficiencies and monitor product quality.

"The second program, general surveys, provides funds to help generate new process or equipment ideas for ammunition and to do investigative work as may be requested by management.

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