

TO: KEN SOUCY

FROM: MICHAEL KEENEY
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TOPIC: SEPTEMBER 1992 PROGRESS REPORT

o PROCESS DEVELOPMENT/RESEARCH OF NBAR:

Due to machine scheduling complications at the Ingersoll Gmbh facility, the second EDM evaluation has not been completed. An expected completion date is not available at this time.

The preliminary evaluation of the proposed tri-lug locking system has been completed. The evaluation included a sequence of firing progressively higher pressure producing cartridges. The first step was to fire a standard proof load, no deformation was observed. The second step was a high pressure load that would ensure blow back through the primer pocket. Although the bolt could not be opened by hand, a tap with a lead hammer rotated the bolt and allowed opening of the bolt. No visual failure was observed, upon further inspection it was noted that the headspace was increased by approximately .003", but remained within specification. Each component was magnafluxed and reassembled prior to the final step. The final test had the bore obstructed with three bullets, a high pressure load chambered and the trigger pulled. Upon inspection, the bolt was locked, the bullets had exited through the muzzle, but no mechanical failure of the receiver was visible. The test assembly was sectioned through the locking area for inspection of the internal condition. There was no apparent mechanical failure of the internal locking mechanism.

To further develop an understanding of the market place and the customer perception of the NBAR, Marketing has tentatively scheduled a focus panel for November, 1992. Three prototype guns are currently under development.

Development and modeling of components has been continuing. The current list of parts modeled include a "Remington Scope Mount System", recoil/bedding inserts, the continuous barrel and receiver, the bolt body assembly and a claw style extractor.

o M/7400 OPERATING HANDLE/BOLT CARRIER ASSEMBLY:

Three guns have been assembled and are currently on the test schedule. Due to the low priority, an expected test date is not available.

o M/7400 M.I.M. OPERATING HANDLE:

The Lonoke facility has completed the endurance testing. Of the four guns involved in the testing, three guns successfully completed endurance levels exceeding 2500 rounds, with one gun exposed to 6000 rounds. The fourth gun was eliminated from the test due to non-related functional problems. The guns will be returned to Ilion for inspection.

o XP-100 WOOD STOCK:

The project approval was received on August 4, 1992. Following approval, the design was transmitted and orders placed for purchased components and production tooling.

A visit was made to Bishop to review the initial production run of wood stocks. Due to the lack of permanent inspection gauges a temporary inspection process was developed. The design of the permanent gauges has been completed and will be delivered to the Tool Room. The initial production quantity of stocks were received on Sept. 18, but had to be returned for rework due to various incorrect dimensions. A second shipment of stocks produced to the correct dimensions is expected by Oct. 9, 1992.

o ECM of CENTERFIRE RIFLING:

Endurance testing is continuing at the Ilion facility. Due to the lower priority of this testing, no expected completion date is available.