TO: KEN SOUCY

FROM: MICHAEL KEENEY
DATE: 11/02/92

TOPIC: OCTOBER 1992 PROGRESS REPORT

o PROCESS DEVELOPMENT/RESEARCH OF NBAR:

Ingersoll Gmbh has completed their evaluation of Electro-Discharge Machining the receiver locking geometry. Although the process was capable of producing quality products, a 30 minute cycle time was not acceptable.

Currently, there are two processes under evaluation to produce the locking system. The optimum process utilizes our hammer forging machines while the fallback process incorporates an internal keyway slotting machine.

The Marketing Focus Panel has been rescheduled for early 1993 due to other Marketing obligations. Marketing has requested three versions of NBAR be produced for the focus panel. The Tool Room is working the components into their schedule as the higher priority jobs are completed. No expected completion date is available. Once the receiver/barrel units are complete, John Remington can begin development of the stocks.

o M/7400 M.I.M OPERATING HANDLE/BOLT CARRIER ASSEMBLY:

Three test firearms have successfully fired 2000 rounds each. The design has been reviewed with Process Engineering as well as the production assemblers. Eight samples were submitted to the assemblers for their evaluation. Once assembled, the eight firearms will also be subjected to firing of 2000 rounds. All prototypes to date have been produced from the wrought bar stock material. If the eight gun test results are favorable, the M.I.M. tooling will be altered and samples produced for testing.

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.

o REAR SIGHT SLIDE IMPROVEMENT:

As part of the NBAR focus panel gun development, Marketing had requested a new open sight design. One of the major objections to our current sight is the vertical adjustment feature. Complaints are generally either the slide can not be tightened enough to prevent movement or once locked cannot be easily readjusted.

The complaints and history of the M.I.M slide were reviewed with Frank Ogrodnik . Apparently the slide material was originally 98% iron and 2% nickel. During assembly, the clamping threads would strip before enough force was applied to hold the slide in place. The current material is 100% iron, which is more ductile than the 98% iron/2% nickel material. Now, once the slide is tightened, the yield strength of the material is exceeded causing plastic deformation of the clamping members. The result is a slide that cannot be easily readjusted.

Of the two materials, the 98% iron/2% nickel is more desirable from a processing standpoint. Therefore, an alteration to the slide, that will reduce the required clamping force, has been developed. Frank will have sample 98% iron/2% nickel slides ready for alteration by Nov. 6, 1992.