TO: KEN SOUCY

FROM: MICHAEL KEENEY

DATE: 02/24/93

TOPIC: FEBRUARY 1993 PROGRESS REPORT

o PROCESS DEVELOPMENT/RESEARCH OF NBAR:

All components required for the initial forging operation were received by Feb. 15. The forging took place on Feb. 16, with moderate success. The purpose of this operation was to determine if the material would flow into the locking lug recesses in the mandrel. Seven receivers were forged at incremental reductions, the reduction of the seventh piece was approximately 11%. Although only half fill of the locking lug recesses was achieved, it proved that the material will flow as desired. It became apparent that the blanks used for this operation were not large enough in diameter to provide sufficient material to fill the lug recesses completely. The Tool Room is currently machining larger diameter blanks for a second test. The second test should be completed by Mar. 5, 1993.

On Jan. 27, Jim Rabbia and myself traveled to Carrier Corp. in Syracuse to review the "Noburr" recessing tool. Their operation involves recessing approximately one hundred holes of .625" dia. per part. The recessing tool utilized in their operation is required to run continuously throughout their working shifts. I felt it was a good testament to the durability of the tool. An order for a trial tool will be placed once the internal receiver geometry has been confirmed.

Due to conflicting interests and objectives between Marketing and Research, the Focus Panel originally scheduled for February has been tentatively rescheduled for June. The prototypes that were to be used in the Feb. panel were developed to reflect the one piece concept, not full cosmetic replicas as thought by Marketing. Full cosmetic replicas will not be complete until late second quarter or early third quarter.

- o M/7400 M.I.M OPERATING HANDLE/BOLT CARRIER ASSEMBLY:
 No further testing has been completed due to other
 Test Lab obligations.
- o <u>ECM of CENTERFIRE RIFLING:</u>

 No further testing has been completed due to other Test Lab obligations.

- o REAR SIGHT SLIDE IMPROVEMENT:

 No further testing has been completed due to other Test Lab obligations.
- o M/320 BARREL ASSEMBLY POLISHING:

 The jeweling fixture has been completed and is expected to be on plant by Feb. 26. Once inspected, the process development will begin. Completion of the process development and release to production should be completed by Mar 10.