30 August, 1993

x.c. F.E. Schmidt

To: R.J. Orf

From: G.D. Sietsema

RE: MONTHLY REPORT - AUGUST 1993

This months efforts were devoted primarily to optimizing newer processes for the Peerless and M/700 SS. Time was also devoted this month to development of new processes for the M/700 DM and investigation of materials for the M/870 Cantilever Sight. The remainder of my time was devoted to the standard processing support offered through the MET-CHEM Dept.

Following is a more detailed description of some of the projects. I have been working on.

- o Peerless Processes Optimizing the Heat Treat process is on going. Time spent on re-evaluation of Flame Hardening of Fore End Irons. Standardization of NDE for non-critical components (top lever) is under way and should be completed by next month.
- o M/700 SS Process Optimizing the upset process for more uniform fill of the upset dies. With help from Jim Rabbia and Jo Pickett the process will be running by the end of this week. I will be continuing to monitor and improve this process to achieve its savings in raw material and process time of \$300,000 in 1993 alone. The racking and atmosphere of M/700 SS Bolt Body Assy was modified to improve hardenabilty of the bolt body and control excess braze in Harper Brazing Furnace.
- o Partnered with plating vendor and heat treat vendor to develop processes to heat treat and color M/700 SS DM magazine latch. Process for both MIM and Investment cast have been developed. Continuing to develop Heat treat process for the M/700 DM Mag. Spring.
- o Worked with Jack Kast in Arm Service to repair M/3200 Top Locks through a plasma welding process.

NOTE: Robert Raux has been out on medical leave for a ruptured disk since 7-12-93. He will be meeting with surgeons this week to determine if he will need surgery. Peter Cross and especially Steve Staruck have done an excellent job in filling the void that Bob has temporarily left. Steve is filling in for Bob at a seminar on Laboratory Safety and OSHA regulations for chemical laboratories on 8/30 - 9/1. He will be issuing a Trip Report on his return.