

**M/710 Development Schedule Meeting**

Date: Jan. 6&7, 1999

Location: Ilion, NY

Attendance: J. Mead, M. Santillo, G. Sietsema, M. Keeney

During the Dec 18, 1998 M/710 design review, R&D and Manufacturing were asked to develop a proposal that would provide a M/710 offering for introduction in the year 2000. On Jan 6 & 7, Joe Mead, Glen Sietsema, Mike Santillo, and myself met to evaluate the potential of a year 2000 intro. A schedule was developed that would provide a long action only product to offer in 2000, with the magnum offering to follow in 2001. Obviously the schedule is very aggressive and relies heavily on a joint development of the design and manufacturing process. The milestones were established based on aggressive but realistic goals. If a milestone is missed, there will not be an introduction in the year 2000. 83

As presented during the design review, the integral locking lug/barrel combination is the foundation of the M/710 program. The meeting began with a review of the barrel strength requirements based on a Finite Element Analysis (FEA) of the locking lug area. It appears that adequate strength can be obtained via heat treatment of the current centerfire barrel material. The alternative material for the barrel, (AISI 4140) would significantly increase the manufacturing development time and cost. Glen Sietsema and a R&D metallurgist will develop a test plan to evaluate the centerfire barrel material in the heat treated condition. Glen has also been asked to lead the development of the heat treatment process, with expectation that all EET and DAT test barrels will be heat treated according to the production process. Further reviewing the barrel and required processing sequence, Manufacturing indicated that if the barrel contour was changed to a more gradual transition at the receiver/barrel interface, the requirement for a finish turn and polish operation could be eliminated, further reducing the cost to manufacture. Contour options will be discussed during the cosmetic review on Jan 14.

With the barrel guidelines established, the development schedule was the next issue to be addressed. The M/710 design as presented, is a basic bolt action rifle. The benefits of the design are strictly manufacture cost reduction initiatives. Thus, the development schedule was centered around process verification. The schedule, which would provide a year 2000 introduction, dictates that Manufacturing develop the production processes prior to the start of the Design Acceptance Testing (DAT). This requirement will ensure that the design is manufacturable as well as proving the functional aspects of the design. The scheduled DAT start date is June 28, 1999, thus substantial effort by the Manufacturing group will be required between now and June 28. Although the Manufacturing group believes the schedule is obtainable based on an assumed first priority bases, when presented to Jim Rabbia, the assumption of first priority was questioned. If the program is to be run as a year 2000 introduction, priority and staffing of all process oriented programs must be reviewed. Jim has been asked to discuss the issues with management and notify the team of the manufacturing intent relative to introduction date. If the priority and staffing assignments remain as currently listed, a M/710 introduction in the year 2000 will not be obtainable. The development team is progressing according to the year 2000 introduction schedule, presentation of the development schedule will be Feb. 4, 1999 at the SHOT Show.