

Model 710 Non-DAT Tests Review Meeting (3/7/00)

A meeting was held on 3/7/00 to discuss what additional Engineering Tests should be run on the Model 710. Since these are "Engineering Only" Tests, not part of DAT, the primary purpose is to learn as much as possible about the structural integrity of the newly designed M/710 fire control assembly. It's important to note that there is no Pass/Fail criteria established for any of these proposed tests. They are being run for information only.

Present: Dale Danner Mike Keeney
 Scott Franz Brian Rages
 Todd Cook Jim Urbon

After some discussion it was decided to run three additional tests. Test #1 is a Strength Test, Test #2 a Fatigue Test and Test #3 a Creep Test. A brief description of each of these tests follows along with the person(s) responsible for carrying this out.

• **Test #1: Strength Test**

The purpose of the test is to determine what happens when an extreme load is applied to the Firing Pin Head/ Sear Safety Cam interface. The load will be applied by pushing on the rear of the Firing Pin Head with the Instron Machine with the bolt in the closed position, safety Off. Of primary interest is deformation or breakage of any of the parts, pins or deformation of the side plate pin holes as a result of the severe overload. A test protocol along with a means to measure the amount of deformation or damage will be the responsibility of Jim Urbon with assistance from Scott Franz. Mike Keeney will supply the needed parts for this test.

• **Test #2: Fatigue Test**

The purpose of this test is to repetitively load the sear with a higher than normal load. Brian Rages, Mike Keeney and Todd Cook will establish the load to run this test at. Brian will utilize a pneumatic cylinder to cycle the load on and off repeatedly. Mike will supply the needed parts for this test.

• **Test #3: Creep Test**

The purpose of this test is to load the sear with a higher than normal load and store the assembly at an elevated temperature for an extended length of time. The load, temperature and time will be established by Brian, Mike and Todd. A way to measure movement of the assembly, specifically the sear, if it occurs needs to be developed before this test can be run. Brian will be responsible for carrying this test out with help from Mike and Todd. Mike will supply the parts for this test.

The goal is to have these tests completed by the end of Phase 1 DAT. Since DAT is to start soon activity on these tests should start as soon as possible.

ET07278