## Will James

From: Franz, Scott

Sent: 06/29/2005 02:37:54 PM

To: James, Will

CC:

BCC:

Subject: FW: Re: Model 710 Short Action Test Plan

Forgot to include you in this e-mail.

Scott

From: Franz, Scott

Sent: Wednesday, June 29, 2005 10:24 AM

To: Bristol II, Ronald H; Diaz, Danny; Lance, Kevin D.

Cc: Millner, Tommy; Campbell, Don H.; Trull, John, Norton, Vince; Snedeker, Jim; Reesor, Phillip K.

Subject: Re: Model 710 Short Action Test Plan

Importance: High Sensitivity: Confidential

Ron,

As requested we have reviewed this program with Diaz's group and Mayfield and have put together a test plan to qualify this product for production. The short action utilizes the same parts as the existing M/710 with the following exceptions:

## PART DIFFERENCES

- \* Magazine Box
- Magazine Follower
- Magazine Box Bottom
- \* Receiver Insert
- Support Bracket
- \* SPL Fire Control
- \* Magazine Box Spacer

Changes to the stock tool will be required to add additional clearance for the safety arm/button and the fire control housing. The receiver rear diameter that accepts the new insert will also be different (larger) than the existing M/710.

With these changes the main focus in testing will be accuracy (for the 3 new calibers), feeding, and then function, endurance and abuse testing due to the integration of a new fire control in the Model 710 action. Based on manufacturing methods to produce parts, the long tooling lead times, and the risk involved a combined DAT/T&P test was requested. I concur with this approach. Since this will also be a T&P class test we should still sample product from a larger pool. With three calibers Mayfield's plan to build 50 guns/caliber should be adequate. We will randomly select 10 guns of each caliber for our test for a total sample size of 30 guns. With that said the following tests are planned:

## **TEST & MEASUREMENTS**

- Out of Box Inspection (All 30 Guns)
  - \* (Packaging, cosmetics, etc.)
- Preliminary Measurements & Tests (All 30 Guns)
  - \* Headspace/Proof/Headspace
  - Check Chamber Dimensions, Bore, Groove, Twist Rate
  - Check Bolt Head and Barrel Hardness
  - Firing Pin Indent
  - \* Trigger Pull + other SPL Specific Measurements (Engagement, Over Travel, etc.)
  - \* Slam Test 3 Guns
- Jack Function (All 30 Guns)
  - 200 rds./Gun using Rem. and Competitive Ammo Types
- \* Accuracy (5 Guns/Caliber)
  - \* Three 5-Shot Groups/gun/emmo (2 Ammo Types)
- \* Thermal Testing (One Gun/Caliber)
  - Hot, Cold, Heat & Humidity
- \* Trigger Tests (One Gun/Caliber).
  - \* SAMMI Test
  - \* Remington Test
  - \* Dynamic Dust & Debris
- \* SAAMI Jar-Off, Rotation, Drop Tests (3 Guns/Caliber)
- Extended Function & Endurance
  - \* 500 rds/Gun (5 Guns/Caliber)
  - \* 1,000 rds/Gun (2 Guns/Caliber)
  - 2,000 rds/Gun (1 Gun/Caliber)

Ammo requirements to support this testing is about 18,000 rounds split evenly amongst the three calibers. The main reason for the majority of this testing is due to the integration of the SPL fire control.

Any questions or comments are always welcomed.

