Scott Franz

From: Franz, Scott

Sent: 04/26/2001 05:03:29 PM

To: Danner, Dale CC: Reesor, Phillip K.

BCC:

Subject: Test Lab Status

Dale,

Here's a quick status of some Test Program related issues

* M/710 .270 Win T & P - On hold due to misfire (1 gun) and feeding issues(stem lows). Mike Keeney has reviewed these guns and has found the following:

The 1 gun with 15 misfires had a firing pin assembly that was binding resulting in light indents. Appears parts are out of print.

A high percentage of the 30 guns experienced stem low malfunctions. Mike has focused on the depth and configuration of the chamber radius/geometry. Believe the chamber rougher tool operation did not go deep enough.

I would recommend another 30 guit sample (or rebuild the 30 we do have) and retest as follows:

MODEL 710 TRIAL & PILOT TEST (.270 Win.)

Packaging Test; (gun A14)

PRELIMINARY MEASUREMENTS (guns A1-A30))

Trigger pull Measure Headspace Firing Pin Indent

Chamber casts/measurements

FUNCTION & ENDURANCE

10 rd. Safety Function Test w/Lanyard (guns A1-A30)

100 rd. Basic Jack Function Test (guns A1-A30)

400 rd. Extended Function & Endurance Test (guns A1-A10)

clean & inspect

ACCURACY & POLITESTING (guns A21-A30)

Initial Test w/High Quality Scope

Environmental Testing

Hot function test (gun A11) Cold function test (gun A12) Heat & humidity test (gun A13)

- * M/700 SA Titanium DAT Completed all testing. No issues outside of stiff bolt operation in the beginning from brass shaving buildup. This goes away when the guns are cleaned and actually improved with rounds as the action broke in.
- * NAS Started DAT on 4/25. Did Headspace, Proof, Headspace and Out of Battery shim test. Had 4 of 10 guns where the sear spring was either out of position or had fallen off. This was noticed during the Out of Battery shim test. On gun A-7 the tester experienced a very light trigger pull during proof firing. After firing the trigger had no spring force. During dissassembly the sear spring fell out of the gun. DAT is on hold pending investigation by the design team.
 - * Guide Gun EET Performed a high pressure (120 ksi) test along with a bore obstruction

test on samples that had M/7 KS Custom Shop barrel profiles (DWG. D-104800). Both chambers experienced elastic deformation in the chamber area as a result of these tests, the bore obstruction sample registering the most deformation. After a discussion with Randy Murphy it was found that the samples built for next weeks demonstration have the plants Magnum barrel profile. Both Randy and Danny understand that the testing we've recently completed on this was EET only, not a DAT.

- * .223 Frangible Test: On schedule except for the 30 day storage. Got samples in on time but found out later that they were the wrong sample. All testing will be complete on the date Jeff requested except for ballistics on the 30 day storage ammo. Jim S. will write the report on this.
- * Heavy Metal Shot: Bob Lee is currently working on this. Have completed the down range velocity and penetration tests that Dave requested.

