## John Trull

From: Ronkainen, Jim

Sent: 10/20/2003 02:33:55 PM

To: Trull, John CC: Diaz, Danny

BCC:

Subject: RE: New Firecontrol

## John,

To answer your question: yes, we did see variability in the trigger pull force in DAT, but not to the degree you're describing. If memory serves me, most of the DAT trigger assemblies had trigger pull forces that were repeatable from pull to pull within a range of about .25-.30 lbs. We had 7-10 trigger assemblies that were always repeatable to a range of .10 lbs or less. We also had a transful (5 or so) that would only repeat within a range of .50 lbs. I was never able to trace the variability to any identifiable/quantifiable aspect of the trigger assembly or action. I also seem to recall that Model Seven actions seemed to be worse than other actions. Please take all of the observations twe given above with a grain of salt - I don't have access to raw data right now and the measurements were taken well over a year ago, so I'm doing this all from memory. I don't have any specific recollections good or bad about the two trigger assemblies (#7 and #37) you sent to Norm. I'm going to go back and try to better quantify the pull to pull variations we saw in DAT for those two as well as all of the other trigger assemblies.

Variation in trigger pull can come from many sources some in the trigger assembly itself and some from the action in which the trigger assembly is installed. The most likely source of Norm's erratic trigger pull readings is condition of the lubrication of the trigger assembly. Have Norm thoroughly lubricate the trigger assembly with RemOil, and, if he has access to dry moly powder, have him apply some to the trigger sear interface through the opening in the sideplate. If the lubrication doesn't fix Norm's problems, the problem may be with the action he's using as a test vehicle, but determining if that is in fact the case is difficult without having the action in hand to make several measurements and to check the condition of several key components. The problem also could also be somewhere else in the trigger assembly as it is used. Again, I'd need to examine the trigger assembly to make that determination.

Finally, all trigger assemblies show variation in their trigger pull and some vary more than others (potentially a lot more). One of the reasons that we even know this is that we now have better tools available for measuring trigger pull (specifically the Dvorak unit), which allow us to make higher resolution, more repeatable measurements than we've been able to make in the past. When tested with the new tools, the SPL trigger assemblies, overall, showed less variation in trigger pull force than the production triggers, and even the 40X triggers we're testing for you as I write this.

Please let me know if the lubrication makes a difference.

Thanks,
Jim
----Original Message----

From: Trull, John Sent: Monday, October 20: 2003 12:09 PM

To: Diaz, Danny; Ronkainen, Jim Subject: New Firecontrol

Guys,

As you recall, I sent Norm Chandler of Iron Brigade Armory two of the new SPL firecontrols to evaluate. Norm just called and told me that they were having a difficult time getting a consistent trigger pull. According to Norm, they set a trigger at 3.75lbs. They are measuring trigger pull weights as high as 4.5lbs and as towas 3.25lbs from pull to pull. Did you see any variability to speak of in the DAT of the new firecontrol with respect to pull weight?

