

Extractor tension on bolts measured under specification by Ilion.  
 Extractor cut in Bolt Head also measured under specification per Ilion.  
 New extractors fitted to bolts and retested solved issues on all but one gun. A new bolt with a new extractor (extractor tension OK) was fitted to this gun and again retested, solving the ejection issue with this gun.  
 An additional 500 rds. was put on two of these guns to see if extractors took a set, resulting in ejection issues reappearing. Guns functioned fine during this 500 rd. test. Extractor tension could not be measured but seemed to be OK after the 500 rounds.

## 2 Rib Tolerance Extreme Test - Pass

This test was run to determine if extremes in tolerance of the rib attachment to the barrel adversely effected group size. Tolerance extremes were simulated by using thick and thin o-rings to result in tight versus loose attachment conditions of the rib to the barrel. Although some vertical stringing was present the groups recorded were in-line with results generated with the nominal floating rib condition.

## 3 Drop Tests (SAAMI and Extended) - Pass

Four guns of each caliber were tested and all passed SAAMI Jar-Off, Rotation and Drop tests.

Three guns of each caliber were tested in Extended Jar-Off, Rotation and Drop. All guns passed Extended Rotation and Extended Drop. Three failures were recorded in Extended Jar-Off, two at 24 inches and one at 48". These are tests run for information only and do not have a bearing on DAT exit pass/fail criteria.

## 4 Thermal Tests (Hot, Cold, Heat & Humidity, Thermal Cycle)

All four types of tests have been completed  
 Stocks cracking issues - worse for Thermal Cycle and Hot Test conditions.

Recoil Lug area setback occurred during 1st Hot Test after 64 rds..

The Hot test was redone with two guns (both 350 Rem Magnums) with double enforcement screws installed just behind the recoil lug area. Both stocks looked good after this 100 rd. accelerated test.

## 5 Function & Endurance - Post 1,000 rd. Endurance activity

One 300 RSAUM gun, A-5, was run to 3,082 rounds. This stock did crack but no recoil lug area setback occurred during the duration of this test. This gun had a single enforcement screw up front. Although the goal was to run this gun to 4,000 rds the test was stopped at the 3,082 rd. level due to ammo availability. A second 300 RSAUM, Gun A-2, was run to 1,683 rounds with no major issues. This gun had a double enforcement screw up front for the last 1,000 rds. of testing.

Two .350 Rem. Mag guns, A-21 and A-28, were shot to 1,682 and 1,741 rounds respectively. Gun A-21 had a single enforcement screw. Cracks did occur in the stock of this gun but no setback of the lug area occurred. Gun A-28 was tested with stocks with a double enforcement screw for the last roughly 1,100 rds. Two stocks with double screws up front failed in the recoil lug area (both setback) on gun A-28 at about the same round level, about 600 rounds. The first failed stock had been through 1-HOT test cycle previous to this testing. The second stock was a new stock. Failure round levels were 600 and 608 rounds respectively with the double enforcement screw.

The goal for DAT was to test one gun of each caliber to 4,000 rds as the last leg of endurance. With all the extra testing that was done trouble shooting function issues and then the stock issue that was not accomplished. Given the ammo situation, out of .300 RSAUM and low on handloaded .350 Rem. Mag. ammo, there are no plans to run any guns to higher levels than that mentioned here. If anyone feels differently about that please say so now. That will mean purchasing additional .300 RSAUM ammo and handloading additional .350 Rem. Mag. ammo.

## 6 Other Issues

Functioning - The most common malfunctions experienced throughout this test were bolt over-rides(BO), round jumps magazine(RJMB) and fail to eject (FE). In all cases except one identifiable causes were found. Incorrect magazine springs were found on guns for BO's, low extractor tension for FE's and in some cases incorrectly assembled actions for BO's and RJMB malfunctions. In one case, gun A-26, no absolute cause could be found for the RJMB condition.