

Monthly Status Report

Brian Rages

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M504 Dry Cycle

Currently dry-cycling the m504 to test the durability of a through-hardened trigger and sear combination. Currently at 8,000 out of 10,000 cycles on the first of two samples.

Common Fire Control TriggerScan fixture

Some needed extra parts to adapt the fixture for 597 use were purchased. Rework on the side plates still needs to be performed.

Research Project – Impact and ADAMS

Drawings for a fixture to drop masses of specific geometry and weight have been sent out for quote.

Research Project – Compliant Mech. Trigger

Ordered book on compliant mechanisms.

Research Project – Common Fire Control Dry Cycle

Have established basic design of the dry cycle apparatus. Studied previous pump and autoloader dry cycle designs. Have begun work on modeling of the dry cycle apparatus.

Gas Gun Support

I finished some ANSYS work looking for a stronger retaining clip for the interceptor latch.

710 Safety Dry Cycle

Performed a 2,000-cycle dry cycle on a 710 action with a new safety pin clip design. Results were summarized in a report.

Other Support

Created model of 504 engagement fixture V-block. Modified the m504 TriggerScan V-block model. Parts have been made from these models, and they work well.