



## American Rifleman - April 1996

### STI 2011 Hawk 4.3 & Falcon 3.9 from *Dope Bag*



The Accuracy exhibited by the STI pistols evaluated here was more than adequate for personal protection or IPSC Limited Class.

In 1991, veteran practical pistol shooter Chip McCormick and gun parts manufacturer Virgil Tripp introduced a revolutionary high-capacity M1911-style frame in .38 Super that incorporated a lightweight polymer grip portion and a steel upper half. The McCormick/Tripp frame quickly became a hit among both practical and defensive shooters for its unique combination of low weight and firepower. Since 1991, Virgil Tripp has acquired sole ownership of the business, and his company, STI International, now offers several frame configurations, custom parts, and complete guns from compensated models to reduced-size carry pieces. The Hawk 4.3 and Falcon 3.9 fall into this latter category.

The Hawk and Falcon approximate the lengths of Colt's Comander and Officer's ACP guns, respectively. The salient feature of both guns is the modular STI frame, which was designed to be light, durable and able to accommodate a double-column magazine with the same total width as a single-stack M1911. It also had to permit all the normal M1911 custom gunsmithing touches. Those objectives were met by joining an upper frame of 4130 steel (or 7075 T6 aluminum on STI's lightweight

frames) to a thin-walled grip section made of Compolite, an aerospace polymer.

In the front, a two-piece pin attaches the polymer trigger guard to a stud in the underside of the metal frame. In the rear, .050" thick steel plates in the grip fit into corresponding recesses in the upper frame, and clamp both parts tightly together.

The lockwork of both the Hawk and Falcon are pure M1911; virtually any standard-dimension M1911 parts can be installed on the STI frame. Only the magazine catch, trigger and mainspring housing pin are frame specific.

The Hawk and Falcon slides are of Colt Series 70 design and lack the Series 80 firing pin safety plunger. STI makes its slides from 4140 bar stock, and hardens them to Rockwell 42C prior to any critical machining operations, thus preventing heat treatment warpage from affecting critical dimensional tolerances. Pre-heat-treated steel or aluminum is also used to machine the STI upper frame.

STI guns utilize oversized ramped barrels made by Bar-Sto and Schuemann that have a tapered-coned section .695" smaller than the inside diameter of the slide. This design not only eliminates the barrel bushing; the heavier barrel also helps slow rearward slide motion upon firing.

The Falcon is unique in being the only M1911-style gun of its size to have a full-length slide stroke, which enhances reliability. Reliability concerns also dictated a 3.9" barrel length rather than the 3.5" barrel of the Colt Officer's ACP.

While the Hawk uses a 19-lb. Wolff recoil spring, the Falcon uses square-section Glock 22 springs modified to 19 lbs., which last longer and give the same tension with fewer coils than conventional round-wire springs. Both guns feature reverse plugs and two-piece full-length guide rods.



STI pistols exhibit many custom touches, like a skeletonized hammer and custom beavertail grip safety. The prototype beavertail shown has a checkered palm pad and narrowed tail.

The shaft and thumb piece of the slide stop are separate

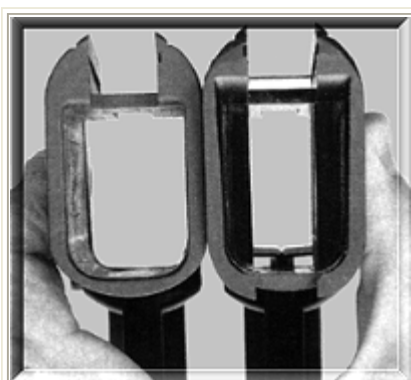
pieces joined by a small hex screw. STI inventories shafts in diameters from .197" to .202"; proper shaft selection allows precise adjustment of barrel lockup as well as the tightening of barrel fit on guns that have shot loose.

Field-stripping the Hawk and Falcon is by the standard M1911 method. To disassemble the frame, first turn out the two pin heads forward of the trigger guard with 1/16" allen wrenches. Remove both upper grip screws, push the frame attachment bushings into the magazine well, and remove the polymer grip. Reassemble in the reverse order. Be sure to align the flats on the frame attachment bushings with the lip on the underside of the upper frame section.

The slides of both the Hawk 4.3 and Falcon 3.9 we received were blued, with polished flats. Our Falcon's upper frame was of blued steel, while our Hawk's was black anodized aluminum. Both polymer grip sections featured identical molded-in 20-line-per-inch checkering on the frontstrap, squared trigger guards, and molded checkered grip areas, but the Falcon grip section measured .300" shorter than the Standard STI grip. Each gun also featured a custom beavertail and lightweight composite trigger.



The stud toward the front of the metal upper frame aligns with the hole in the grip frame's trigger guard, and it is secured by a two-headed pin: in the rear, steel plates set into the grip (see arrow) fit into recesses in the frame.



The magazine wells of the high capacity and new single-stack STI grip sections.

Our Falcon 3.9 came with STI's widebody 10-rd. magazine and high-capacity polymer grip. The Hawk, however, featured a prototype of STI's new single-stack grip, which has thickened magazine well walls and a relocated magazine catch for standard M1911 magazines. This grip will allow the use of M1911 magazine without the loss of the familiar feel of the high-capacity grip. STI offers several sight options. Our Hawk had a low-mount Bo-Mar rear sight and a dovetailed and pinned STI ramped post front sight. A Novak rear carry sight and STI front sight adorned the Falcon.

We shot the Falcon 3.9 for accuracy with the results shown in the accompanying table. A number of groups fired with the Hawk established that its accuracy was generally on a par with its smaller sibling. Both guns were function-fired with Black Hills, CCI, Eldorado, Federal, Remington and Speer ammunition. Hollow-point ammunition predominated in our tests of these defensive guns, though both guns also fed 185-gr. semi-wadcutter target rounds. The Falcon often threw the last shot out of a

magazine to a different spot than the previous shots. We had to load six or seven rounds in the magazine to get consistent five-shot groups.

Reliability of both guns was good but not perfect. The Hawk 4.3 jammed only once, on the first round of a full magazine, it fed flawlessly. The Falcon 3.9 also had one jam, with Hornady's 200-gr. copper-clad semi-wadcutter target bullet. Additionally, it was difficult to fill its 10-round magazine. Possibly the follower was binding inside the magazine body, or the capacity-limiting indentations on the magazine body interfered with the magazine spring. STI states that a redesigned 10-round magazine body will be standard issue in future. Both guns ejected strongly and consistently to the side. The hammer of the Falcon 3.9 followed to half-cock once, and the pistol also doubled once during firing. Though easily cured by a gunsmith, such a malfunction is nonetheless unacceptable -- particularly in a gun in this price range.

ACCURACY RESULTS				
.45 ACP Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Black Hills 230-gr. JHP	965 Avg. 17 Sd	1.86	3.21	2.83
Remington 185-gr. JHP+P	983 Avg. 6 Sd	2.00	2.98	2.54
Speer 185-gr. GDHP	965 Avg. 26 Sd	1.74	3.16	2.38
Average Extreme Spread				2.58
Five consecutive 5-shot groups from 25 yds., fired from sandbags. Abbreviations: Sd (standard deviation), JHP (jacketed hollow point), GDHP (Gold Dot hollow point)				

The grip sections of both guns felt boxy, but provided no difficulty for small-handed persons. The molded-in checkering was "sticky" but easier on the hands (and jacket linings) than steel checkering. The recoil-absorbing polymer grip made shooting comfortable even with high-intensity ammunition. Both the Hawk and Falcon would serve well as defensive pistols. The crisp 4-lb. triggers, good ergonomics and excellent sights facilitated quick, accurate shooting.

The Hawk 4.3 and Falcon 3.9 are priced comparably to some custom single-stack M1911s, though less than many custom high-capacity pistols. Though not true custom pieces; the STI guns are still much better than most other production guns we've seen. These guns will appeal most to those who desire light weight, good shootability and the versatility afforded by interchangeable grip frames. - NRA

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