

The STI Grand Master is designed to be used at the top levels of IPSC competition shooting. The pistol comes with the C-More sight fitted as standard.



# STI GRAND MASTER RACE GUN

*Choice of Champions*

BY GREG ROBERTS

**For those competitors who demand the ultimate in an IPSC race gun, STI International can provide them with the Grand Master. Incorporating unique features with their manufacturing technology and compensated barrel, STI's Grand Master is a competition ready factory pistol with all the features of a customised pistol.**

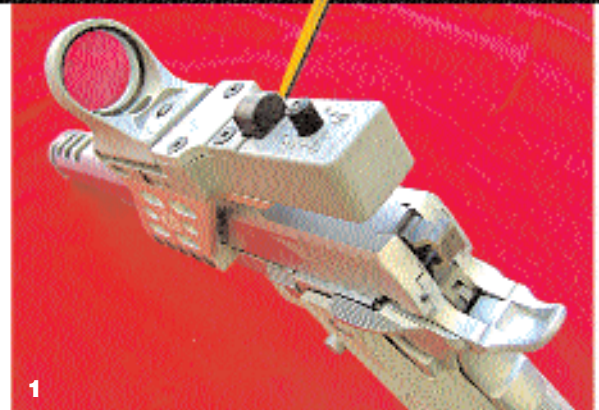
**S**TI use the nomenclature 2011 for their pistols. This lets you know the lineage of their guns, but is also an expression of their further development of the M1911 design. The company is a modern manufacturer using state of the art CNC (computer numerical control) and wire EDM (electronic discharge machining), which enables them to manufacture a very sophisticated production pistol using stock parts that are of very high quality, due to the modern manufacturing processes that they use.

Originally only offered from the STI custom shop, the Grand Master is now available as an off-the-shelf model. Built on the patented modular steel frame with a polymer grip, the pistol is fitted with the Trubor compensated barrel, which is machined from 416 grade stainless steel. The Trubor is designed to eliminate misalignment of the barrel and compensator bore or movement of the compensator along the barrel threads, giving the shooter a reliable performance and reduced muzzle flip.

The Grand Master slide has scalloped sides, with STI machined

**1: The C-More sight dominates IPSC Open Division. There is little to obstruct your view, so acquisition of the target is very fast and the sight is extremely tough**

**2: The pistol is the culmination of years of R&D, modern manufacturing techniques and competition shooting, resulting in a world championship level firearm**



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rear preparatory cocking serrations, flat top and slide lightening along the rear of the slide. Additional enhancements include STI's Recoil Master guide rod system, STI stainless steel magazine well, stainless steel ambidextrous safeties, stainless steel high rise grip safety, drilled and tapped magazine release button, and

hard chrome finish with colour inlay in the engraving. The pistol comes complete with either a C More or a OKO Reflex sight. The Grand Master is usually built in .38 Super calibre, but it can also be made in 9mm (9x19mm NATO), .40 S&W, 10mm Auto and .45 ACP.

### Grand Master Evolution

High magazine capacity pistol frames have been around since the late eighties, with Para Ordnance developing a high capacity metal framed 1911 in .45 ACP. The grip used in STI pistols was originally developed using computer aided design (CAD) programmes, which

designed and made with one purpose in mind; to be the ultimate winning tool in the demanding arena of IPSC practical pistol competition.

The new design did not take long to fulfil its promise. In the autumn of 1992, Jerry Barnhart used a gun built on the modular frame to win the

USPSA Nationals. The modular design has been a dominant force in IPSC competition ever since. There have been changes in ownership of the design over the years. For a time the frames were marked TRI, then STI (for Strayer-Tripp International). In 1994 the Strayer-Tripp partnership broke up, with Virgil Tripp retaining the STI trademark while Sandy Strayer formed SVI (Strayer



created a modular concept with a steel upper section fitted to a synthetic grip assembly. In an impressive feat of engineering it was designed, built, debugged and into production in a year and the first models were displayed at the 1992 SHOT (Shooting, Hunting, Outdoor Trade) Show. Top IPSC shooters immediately realised the impact the design would have on their sport. A throng of competitive shooters were crowding around a booth at the SHOT Show, trying to get a glimpse of a handgun prototype incorporating the M1911 action, a synthetic grip frame, and high capacity magazines. It was



Voigt International). The initials most often seen, though, are STI, and today these initials are themselves the trademark. Virgil Tripp then sold the Texas-based company to David Skinner, a local Texan businessman and active



**Above: For those who demand the ultimate in an IPSC race gun the Grand Master is a competition-ready factory pistol with all the features of a customised pistol**

**3: Note the blast guard at the front of the C-More, which deflects the expanding muzzle gases flowing through the compensator**

**4: With the C-More sight there is little to obstruct your view of the target, and it is light, helping keep gun weight down so it is faster to track between targets**

competitive pistol shooter, who was involved in electronic manufacturing businesses. Having an interest in firearms and taking part in practical pistol competitions Dave Skinner had met Virgil Tripp at a match, and the rest was history.

Currently STI International makes a wide range of superb 1911/2011 style pistols; single stack and double stack, traditional and modular. There are models to meet most any handgun need; personal defence, home defence, police or military duty. But it was the practical pistol competition arena in which STI first earned its sterling reputation, and it is the competitive arena in which STI pistols (and custom pistols built on STI frames) dominate. In the two biggest IPSC divisions, Open and Standard, at almost any major IPSC match there will be more STI complete pistols and customised pistols made with STI parts than all others combined.

The Grand Master is STI's top of the line pistol for 'Open Division' competition. Originally a 'custom shop only' item, it is now a standard production model. For its purpose it is as good, as well made



5: STI Team member Irene Canetta uses a blued steel GM in .38 Super calibre to compete in IPSC Open Division

Right:

- 1. Slide
- 2. Compensator
- 3. Slide Lock Lever
- 4. Magazine
- 5. Barrel
- 6. Recoil Master System
- 7. C-More Red Dot Sight
- 8. Frame

and as fitted a pistol as money can buy. A few years ago to obtain a first class race gun meant rounding up various components (frame, optical sight, barrel and slide), getting in line to place an order with a custom pistol smith, and waiting several months for the work to be carried out. Now STI have the Grand Master available as a stocked item and

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6: The barrel is five inches long (minus compensator) and fits directly in the slide without a barrel bushing, which means it can be of larger

diameter and heavier, to assist reduction of muzzle climb

Images © Greg Roberts



is ready to go out of the box.

### On the Outside

The STI Grand Master is based on the legendary Colt M1911. The barrel is five inches long (minus the compensator) and fits directly in the slide, without a barrel bushing. This means the barrel can be of a larger diameter and heavier,



which also assists in the reduction of muzzle climb. The slide is CNC machined from 4140 bar stock steel and is surface ground to give the smoothest possible mating surfaces and longest life. When hand cycling the gun, the slide glides along the frame. The breach face is wire EDM cut (an industry first) and the ejection port is enlarged to facilitate the manual ejection of live rounds. The slide has racking serrations at the rear. Unlike some custom guns of this type, STI pistols do not have a 'flat topped' slide, but instead maintain the curved slide top as found on the original M1911.

The Grand Master is built on STI's standard length frame, which has a satin chrome finish. The frame is equipped with ambidextrous enlarged thumb safety and beavertail grip safety. This enables higher grip, which allows the pistol to sit lower in the hand. This in turn lowers the axis of the bore in relation to the gripping hands, which means the recoil comes

more rearward instead of the muzzle climbing skywards. The grip of the Grand Master can be provided in several different colours.

The frame of the Grand Master is a two-part concept with an upper and lower assembly, called the Modular Competition System. The upper assembly is made from 4140 alloy steel and consists of the slide rails and dust cover, contains the trigger mechanism and is mated to the lower assembly. The grip or lower assembly is made from glass filled nylon polymer, which eliminates the need for grip panels, leaving more room for the double column magazine, while keeping the width of the grip at manageable level for the average hand. The use of polymer in the construction of the frame keeps the weight down, making the Grand Master only slightly heavier than a .45 ACP M1911 Colt Government model. The grip is chequered on both sides and on the front and back for a firm hold. The beavertail grip safety features a palm swell or 'speed bump' so that it will be depressed regardless of the style of hold that the shooter uses. The ambidextrous safety catch is very positive in its function and is very comfortable to use.

Built on the steel modular frame, the Grand Master uses STI's classic slide along with the 'sabre tooth' rear cocking serrations, which are both visually striking and functionally effective. The STI ramped one-piece Trubor barrel has an integral compensator called the S-1, which is standard for the 9mm, .40 and .45 cartridges. The .38 Super loaded to major power factor uses a larger powder charge, generating a bigger volume of powder gases, which will utilise the additional room in the expansion chamber of the S-2 compensator.

There is no barrel bushing in the slide; the barrel is cone shaped to fit the front



of the slide when the gun is in battery. The guide rod/recoil spring assembly is STI's Recoil Master unit, which reduces recoil. For several years I have shot an STI Edge with and without the Recoil Master and you can feel the difference in recoil.

### Sights

The Grand Master generally comes equipped with a C-More sight. It can also be ordered from the factory with the OKO Red Dot Reflex sight. I can remember when the C-More first came out; it was just another optical sight competing for a space in the

marketplace. Today there is no doubt who the winner is. The C-More

absolutely dominates Open Division. At major IPSC events there will only be a limited number of optical sights that are not C-More. There is little to obstruct your view of the targets so it is very fast. It is light, helping keep gun weight down so it is faster to move and the sight is extremely tough.

### Trigger

The trigger on the Grand Master is polymer with a flat face; a style popular with a number of top shooters. It is readily interchangeable to suit different styles and hand sizes. Typical trigger pull weight is between three and four pounds. In terms of trigger feel there is a slight initial take up, a clean break and a

small amount of over travel to allow the trigger to reset.

The elongated Colt Commander style, wire EDM cut from A-6 tool steel, is lightened to speed up lock time. When coupled with a STI S-7 tool steel sear gives an excellent

**7: The S-2 compensator fitted to this .38 Super Grand Master allows the expanding gases to flow upwards and outwards, reducing muzzle climb and allowing faster follow-up shots**

**8: The frame of the Grand Master is a two part concept called the Modular Competition System, with upper 4140 alloy steel and lower**

**9**



glass filled nylon polymer assemblies

**9: The trigger, which is readily interchangeable to suit different styles and hand sizes, is polymer with a flat face; a style that has been made popular by a number of top shooters**

trigger pull, which on the pistol under test was 3½ pounds. The magazine release button is slightly extended, to aid positive reloads, but not too much to unintentionally dump the magazine from a holstered pistol. The slide locking lever is recessed into the frame. Several people who handled the gun found it a bit awkward to manually lock open the slide. The easiest way is to pull back the slide using the cocking serrations with your support hand, while twisting the pistol slightly in your strong hand and pushing the slide locking lever up with your strong hand thumb.

**10: The frame is equipped with ambidextrous enlarged thumb safety and heaver tail grip safety, which allows the pistol to sit lower in the hand**

**10**



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**11:** The Ghost competition holster, which is adjustable for both height and angle of carry for a smooth uninhibited draw, was used to hold the Grand Master during our range tests

The trigger pull is satisfactory by factory standards, but heavy for competition use. Most competition shooters in Open Division like lighter trigger pulls, generally around two pounds. With today's precision manufacturing techniques and hardened steel materials a two pound trigger pull on a M1911 is easy for an experienced gunsmith to set up. STI set the trigger to be controllable by any user, while more experienced

**12:** Draws from a Ghost competition holster are faultless making single shots, accelerated shots and rapid



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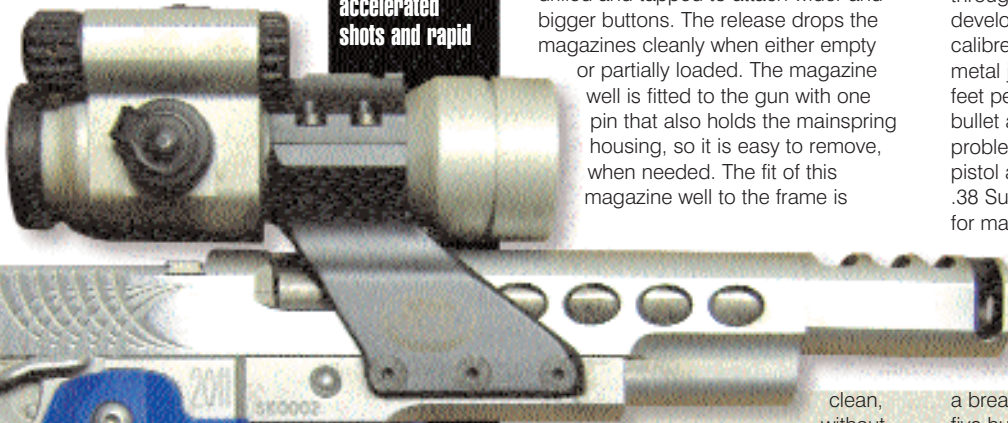
parts, the chance is smaller that something will break and cause malfunction.

### Magazine

The magazine release button can be drilled and tapped to attach wider and bigger buttons. The release drops the magazines cleanly when either empty or partially loaded. The magazine well is fitted to the gun with one pin that also holds the mainspring housing, so it is easy to remove, when needed. The fit of this magazine well to the frame is

law enforcement organisations. During the gangster area, both cops and FBI agents were involved in numerous shooting incidents, with many of these both in and around motor vehicles. It was found that the M1911 in .38 ACP calibre had difficulty in penetrating through automobile bodywork. Colt developed the M1911 in .38 Super calibre, which launched a 130 grain full metal jacket bullet at some 1100 to 1200 feet per second. The narrower diameter bullet at a higher velocity had no problems in penetrating car bodies. As pistol ammunition further evolved, the .38 Super cartridge lay in the doldrums for many years until it was found to be the ideal calibre for IPSC Open Division, which has given it a major boost in popularity.

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clean,

without

any overlap. The magazine well at the base of the grip is flared in order to accomplish fast reloads.

The magazines for the Grand Master can be up to 170mm in length to be eligible for IPSC Open Division, and they can have a capacity of some 24 rounds of .38 Super calibre. Magazines can easily be taken apart for occasional cleaning. The Grand Master is built to be race ready from the box, for IPSC Open Division. The .38 Super is the cartridge of choice in this division, as size for size it allows a greater magazine capacity than any other major calibre round.

Race guns are built to close tolerances and sometimes need a break-in period. STI suggest running five hundred rounds through the Grand Master to burnish moving parts for smooth operation before taking it to a match. Prior to taking this or any pistol to a competition, or more seriously, carrying it for your personal defence where allowed, you should fire this amount of ammunition through it, utilising all the magazines you have for it.

### Range Tests

Accuracy testing was carried out at 25 yards using a mixture of factory ammunition and ammunition reloaded to IPSC major power factor. With the pistol rested, five shot groups of between one and two inches in size were achieved. This is due in no small part to the excellent sights and trigger.

Standing with two hands unsupported gave a ten shot group of four inches at 25 yards. I also carried out a series of speed drills in drawing from the holster and shooting with two hands, strong hand and weak hand, at one and multiple targets from five to twenty five yards. I fired double taps with both, strong and weak hands as fast as I could obtain a sight picture and also

shooters can have a gunsmith tune it to their requirements.

The Grand Master is not fitted with an extra firing pin block, which is used by several manufacturers to fit their current production

1911 models. This addition can make the trigger pull heavier and less smooth. The firing pin in the Grand Master has a heavier spring, which is a solution used in Springfield Armory M1911 pistols, and this does not mean that the weapon would be less safe. Quite the contrary, because as there are less little moving

fire strings find their mark

**13:** Built on the steel/nylon modular frame, the Grand Master uses STI's classic slide with 'sabre tooth' rear cocking serrations. Note personalised SK0002 serial number for Saul Kirsch



fired deliberately aimed shots at the upper A/B zone of a practical pistol target.

The Ghost competition holster was used to hold the Grand Master during this exercise. The holster is adjustable for both height and angle of carry for a smooth uninhibited draw. Draws from the Ghost were faultless. Single shots, double taps and rapid fire strings all found their mark.

### Firearms Development

In the eighties STI founder Virgil Tripp was hand crafting competition M1911 pistols using basically the same components and techniques of other gunsmiths of that era. Because of the need for product improvement, Tripp Research Inc. (now STI International), led the firearms industry into the precision world of EDM hammers, sears, and other components.

From this highly successful line of precision components, STI then pioneered the modular frame, which provided a multitude of desirable features such as a 30 lines per inch (lpi) full chequered grip assembly, 25 lpi chequered trigger guard, 35 percent weight reduction, less felt recoil, higher capacity, and repeatable dimensions. Then STI introduced complete pistols of such quality they quickly became the standard by which other pistols used in IPSC competitions are measured. Now STI leads the industry again with



**14:** Four of the six members of STI European IPSC Team. Gregory Midgley and Fabrizio Pesce use .40 S&W STI Edge models. Ralf K. Jensen uses a .40 S&W STI Executive and Irene Canetta uses a STI Grandmaster in .38 Super

precision subassemblies in progressive stages of factory completion. Using EDM and CNC machine tools and precision grinding equipment, STI can supply slides and frames which gunsmiths can use to build match pistols for customers.

### STI European Championship

Each year STI sponsors a major practical pistol competition in Europe. The next European Practical Pistol Championship takes place in September 2007. The 6th STI European Open, held in Philipsburg in Germany in May,

Europe, STI International has also formed a European IPSC Shooting Team. Launched at the 2006 IWA Firearms Fair in Nuremberg, the team takes part in the top level IPSC matches around Europe. It comprises six of Europe's top Open and Standard Division shooters; Saul Kirsch and Irene Canetta shoot in Open Division and Fabrizio Pesce, Gregory Midgley, Herbert Jakob and Ralf K. Jensen shoot in Standard Division. Junior shooter, Emile Obriot of France has just been announced as the newest addition to the STI Euro Team. He joins Saul Kirsch and Irene Canetta in Open Division.

### Conclusion

High capacity M1911 style pistols are not just popular among target shooters. Law enforcement officers and military units who were familiar with the M1911 realised that many of the features that were desirable in a pistol for IPSC competition shooting were equally beneficial in a pistol carried on duty. The US Army's Special Forces Operational Detachment (Delta Force), the FBI Hostage Rescue Team and the LAPD SWAT are among many agencies that carry M1911, cocked and locked, .45 calibre pistols. Many of the features that are found on the pistols that these units carry were originally developed for and tested in the field of IPSC competition pistol shooting.

An accurate pistol is only one part of practical pistol shooting. IPSC, SWAT and Hostage Rescue require dynamic shooting. They require that the shooter and weapon act 'as one'. The shooter needs to know how to handle his or her gun and how it will perform in all situations that they will face. That requires a well made weapon that is accurate, dependable and, above all, one that will not have any malfunctions or other problems. Demanding the ultimate is the reason why STI pistols are so popular among top shooters, and not just target shooters, around the world.



**15:** Bucking the C-More site trend, Saul Kirsch competes in IPSC Open Division with an



Aimpoint sight attached to his GM

became one of the main matches for many IPSC shooters in the run up to this year's European Championships. The match organisers took on the big task of allowing 330 plus shooters to participate - and the match was sold out.

### STI IPSC Team

As well as sponsoring a major match in

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[www.gunmaker.de](http://www.gunmaker.de)  
[www.doublealpha.biz](http://www.doublealpha.biz)  
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