# Cutting Edge Ballistics

Cutting Edge Guns from the Edge of Tomorrow

 $\square$ 

## **M Jason Parent**

stem

Requires the use of the d20 Modern(tm) Roleplaying Game, published by Wizards of the Coast, Inc.

Eη

Publishing

## **Ammunition Types**

### 6.5mm S0-2

The 6.5mm SO-2 round was developed by Heckler and Koch in 2020 as a light submachine gun round to replace the 10mm round. The 6.5mm round casing is almost identical the 10mm ACP round, except the round is lightly 'necked', that is to say that the casing is the full 10mm diameter until it reaches the 6.5mm slug, where it is reduced down to the diameter of the slug. The propellant from the 10mm round propels the lighter (3.949 gram) 6.5mm slug over 750 meters / second, nearly twice the velocity of the 10mm ACP. The SO-2 round is a far better armor-piercing round that the 10mm ACP, and Heckler & Koch then began selling conversion kits for the MP5/10 submachine guns to convert them to use this round. Because of Heckler & Koch's high visibility, several other companies still manufacturing 10mm weapons also adopted this round and produced after-market conversion kits, as well as a fair number of third-party conversion kits to switch 10mm ACP firearms to operate with the 6.5mm SO-2 round.

NEUL

A box of 20 6.5mm SO-2 rounds has a purchase DC of 5.

#### 11.5mm x 37mm Caseless

Italian gun manufacturer Benelli developed the 11.5mm caseless round in conjunction with Fiori, an Italian ammunition manufacturer that also developed the 9mm caseless round in the 1980's. The 11.5mm round looks like a bright blue slug, 37mm long and of uniform width with a slight taper ending in a countersunk tip at one end. The round is particularly heavy for a caseless slug, at 21 grams total mass, of which 20 grams are dedicated to the lead bullet. The bullet and propellant are sealed in a bright blue lacquer which burns away without residue when the round is fired. The round erupts from the barrel with nearly identical ballistics and energy as the .44 Magnum round. Because of the heavy recoil of the round (also nearly identical to the .44 Magnum), the 11.5mm round has seen limited adoption internationally, with most firearms using this round being designed by Benelli or a subsidiary.

A box of 20 11.5mm caseless rounds has a purchase DC of 6.

#### 7mm x 46mm LR

The 7mm Light Rifle round was developed by Colt as an experimental round to pair the stopping power of the 7.62 NATO round with the lighter weight of the 5.56 NATO standard rifle ammunition. The round was used in a few light hunting rifles sold in North America and Europe and an aborted assault rifle design that never came out of the prototype stage. With the round available temporarily through several major ammunition manufacturers, Cameron & Sooch developed the first full production run assault rifle in this calibre, the C&S Model 6. The casing for the 7mm is a full 10mm diameter, necked down to the 7mm, 7.9 gram projectile. The round sees rare usage beside these military rifles, and the civilian hunting rifles were discontinued some time ago. The short overall length of the 7mm round has also made it usable in powerful submachine guns, including the Colt M-88.

A box of 20 7mm Light Rifle rounds has a purchase DC of 6.



# Arcadia Machine & Tool AMT 1159 Automatics

NEUL



Arcadia Machine & Tool was made famous by their first major commercial release, the AMT Automag, an automatic pistol chambered in a heavy .44 Magnum round (actually a cut-down rifle round). Unfortunately for AMT, there was never enough demand for the .44 Automag round to encourage the mass production of the round. Combined with the high price of the Automag itself, consumer demand was very low and the gun itself was discontinued.

In 2020, the AMT brand name resurfaced under the ownership of the Italian Benelli corporation, which in turn is now owned by the venerable American firearms giant, Colt. Arcadia Machine & Tool continues to develop and release firearms from an American in-house design team, however funding to this venture is controlled by the operations division of Benelli. AMT focuses on designing heavy handguns using odd-ball ammunition varieties.

Introduced in 2029, the AMT 1159 is manufactured in the United States and is the first American-made handgun using the Benelli 11.5 x 37mm caseless round. The 11.5mm caseless is a handgun round designed for use in heavy submachine guns. It is in mass production in Europe and is available in limited quantities in the United States through Colt. Compared to some of the submachine-gun prototypes designed for the 11.5 Benelli, the AMT 1159 is quite "retro" in overall functionality, harkening back to the AMT Hardballer designs based on the classic Colt M1911. The action of the AMT 1159 uses the same Browning cam-actuated locked-barrel design. The trigger is single-action and there is no decocking lever. The gun is otherwise a typical single-action automatic, with a closed slide mechanism (since there is no casing to eject in the firing process).

While submachine guns designed to use the 11.5 Benelli round have had to use a variety of design implementations to reduce chamber heat in order to avoid premature round cook-off (a standard operating concern when using caseless rounds in a closed mechanism), the lower rate of fire and limited capacity of the AMT 1159 allows it to use standard feeding and firing mechanisms.

The primary safety mechanism of the AMT 1159 is the firing pin decocking safety. When loaded, the firing pin is kept uncocked until the grip safety (the two visible panels on the back of the grip near the thumb area) is depressed. This draws the pin back, readying the gun for firing. When the grip is released, the pin is instantly decocked. This makes the weapon safe if

Weapon	Damage	Crit	Туре	Range	ROF	Mag	Size	Wt	Cost	Res
AMT 1159 Long Slide	2d8	20	Ballistic	40 ft.	S	11 box	Medium	4 lb.	17	Lic (+1)
AMT 1159 Tactical	2d8	20	Ballistic	30 ft.	S	11 box	Small	3 lb.	17	Lic (+1)
BlackHammer Firearms	1 - Page	2								



dropped. In addition, the gun cannot be fired if it is pressed firmly against an object. However, there is no traditional safety on the polymer frame of the gun, a strike against it in the eyes of many security and law enforcement groups. The AMT 1159 is available in two different frame styles, the 'tactical' model which is 18 cm long (7 inches) and the 'long slide' at 22 cm long (8 2/3 inches). The heavy recoil of the 11.5 Benelli round gives the tactical model a sharp upwards kick, whereas the heavier and longer 'long slide' model holds more steadily in the hand according to most shooters. The tactical model is manufactured primarily as a backup sidearm for forces equipped with Benelli 11.5mm submachine guns, whereas the long slide model is sold primarily to high tech firearms enthusiasts who don't mind that they have only one reliable supply of ammunition in the world.

## Cameron & Sooch Elite 10mm ACP Automatics

NEUL



The revival of the 10mm ACP round for submachine guns in the early teens of the 21st Century meant a resurgence of handguns chambered in the heavier handgun load. In the interim, only Glock was still producing a 10mm automatic pistol (the Glock Models 20 and 29).

In 2015, Cameron & Sooch released the Elite, a full-frame automatic pistol. At its heart, it is a singleaction, recoil-operated, locked breech pistol with a tipping barrel and external hammer. It has standard features for a 1911-derived automatic, with an ambidextrous safety, a magazine disconnect safety and a slide disconnect safety. The latter prevents the gun from firing if the slide is not closed completely. The top of the slide has raised grooves that were designed to allow the weapon to be cocked single-handedly by pushing it against a table or desk other another surface edge. The frame and body are made of high-tensile steel and are available in a variety of finishes (stainless steel and matte black are the most popular, although a fair number are in classic blued-steel). The grip is a metal frame with exposed forward section, wrapped in black rubber (although polymer grip panels are also available in a variety of colours).

The magazine in the Elite is a double-stacked box of 14 10mm rounds. Under the barrel of the Elite is a polymer shell that significantly increases the profile of the handgun, which is used to house a laser sighting system without marring the lines of the gun. Combined with the steel construction instead of light alloys or polymers, this makes the Elite quite heavy for a modern sidearm. If anything, this makes it more popular among many American firearms enthusiasts who feel more comfortable with a heavy 'piece'.

The Elite was picked up as the sidearm of the Canadian Border Guard division of the Royal Canadian Mounted Police. It was also licensed for production in Turkey, where it has become the standard military sidearm and also sees significant police use.

With the success of the Elite, and increasing sales into the American civilian market, Cameron & Sooch introduced an expanded series of sidearms in 2018, including Elites chambered in .45 ACP, .357 SIG, .40 S&W and .41 AE. Finally, the line was extended with the release of the Operations Elite, a longer-barrel edition of the Elite with barrel porting and a grip-extending magazine increasing the capacity of the box magazine to 19 rounds as well as increasing the size of the laser sighting system giving it longer range and more battery power. The Operations Elite extends the size of the frame from the standard 7.5 inches to a full nine inches long. The longer design also increases the weight of the Elite significantly, reducing muzzle-flip to being nearly imperceptible.



The alternate chamberings for the Elite sold fairly well throughout the United States and met limited acceptance in foreign markets, with the only noticeable purchase being the Internal Security Bureau of Grenada which acquired a number of .357 SIG Elites and Operations Elites. The Operations model in 10mm ACP also was adopted for some specialized units in the Canadian Border Guard and for Turkish special forces units.

In 2023, C&S released the Model 12 series of the Elites. The Model 12 line includes both the Elite and the Operations Elite chambered in 10mm and .45 ACP, and switching many parts of the assembly to a high-

tensile light alloy, reducing the weight of the sidearms by a full pound. Additionally, the barrel lug assembly was changed to mount the barrel to the bottom of the frame using a cam assembly.

In 2030, C&S revisited the Elite one more time with the Model 15 updates to the Elite and Operations Elite, chambered in 10mm ACP as well as the new European 6.5mm SO-2 round. The Model 15's are identical to the Model 12 but are only available in stainless steel and matte black finishes. In addition, Cameron & Sooch released the Elite Model 16 at the same time. The Model 16 is a select-fire machine pistol modeled after the successful Beretta Model 93R,

Weapon	Damage	Crit	Туре	Range	ROF	Mag	Size	Wt	Cost	Res
C&S Elite 2015 10mm	2d6	20	Ballistic	40 ft.	S	14 box	Small	4 lb.	17	Lic (+1)
C&S Elite 2018 .45	2d6	20	Ballistic	30 ft.	S	14 box	Small	4 lb.	17	Lic (+1)
C&S Elite 2018 .357SIG	2d6	20	Ballistic	40 ft.	S	14 box	Small	4 lb.	18	Lic (+1)
C&S Elite 2018 .40S&W	2d6	20	Ballistic	30 ft.	S	14 box	Small	4 lb.	17	Lic (+1)
C&S Elite 2018 .41AE	2d6	20	Ballistic	40 ft.	S	14 box	Small	4 lb.	17	Lic (+1)
C&S Operations Elite 10mm	2d6	20	Ballistic	40 ft.	S	19 box	Medium	5 lb.	18	Lic (+1)
C&S Operations Elite .45	2d6	20	Ballistic	40 ft.	S	19 box	Medium	5 lb.	18	Lic (+1)
C&S Operations Elite .357SIG	2d6	20	Ballistic	40 ft.	S	19 box	Medium	5 lb.	18	Lic (+1)
C&S Operations Elite .40S&W	2d6	20	Ballistic	40 ft.	S	19 box	Medium	5 lb.	18	Lic (+1)
C&S Operations Elite .41AE	2d6	20	Ballistic	40 ft.	S	19 box	Medium	5 lb.	18	Lic (+1)
C&S Model 12 Elite 10mm	2d6	20	Ballistic	40 ft.	S	14 box	Small	3 lb.	16	Lic (+1)
C&S Model 12 Elite .45	2d6	20	Ballistic	30 ft.	S	14 box	Small	3 lb.	16	Lic (+1)
C&S Model 12 Operations 10mm	2d6	20	Ballistic	30 ft.	S	19 box	Medium	4 lb.	17	Lic (+1)
C&S Model 12 Operations .45	2d6	20	Ballistic	30 ft.	S	19 box	Medium	4 lb.	17	Lic (+1)
C&S Model 15 Elite 10mm	2d6	20	Ballistic	40 ft.	S	14 box	Small	3 lb.	16	Lic (+1)
C&S Model 15 Elite 6.5 SO-2	2d8	20	Ballistic	40 ft.	S	14 box	Small	3 lb.	17	Lic (+1)
C&S Model 15 Operations 10mm	2d6	20	Ballistic	30 ft.	S	19 box	Medium	4 lb.	17	Lic (+1)
C&S Model 15 Operations 6.5	2d8	20	Ballistic	30 ft.	S	19 box	Medium	4 lb.	18	Lic (+1)
C&S Model 16 Elite 10mm	2d6	20	Ballistic	40 ft.	S	24 box	Medium	4 lb.	20	Res (+1)
C&S Model 16 Elite 6.5 SO-2	2d8	20	Ballistic	40 ft.	S	24 box	Medium	4 lb.	21	Res (+2)



but following the design of the Elite. The heavier weight of the C&S Elite makes it moderately more controllable as a burst fire weapon than the 93R, but even so, controllability is minimal. The design adds a folddown foregrip to permit a two-handed hold. The foregrip folds forward instead of back towards the grip, allowing the machine pistol to be gripped more effectively than the similar design of the 93R.

### d20 Rules

Due to their high quality of manufacture and heavy weight, the original (2015-2018) Elite and Operations Elite models are always considered mastercraft weapons. As such, they grant a +1 bonus on attack rolls.

The Elite Model 16 has a three-round burst setting. When used with the Bust Fire feat, this firearm fires only three bullets instead of five and can be used with only three bullets in the weapon. The setting does not grant the ability to make burst fire attacks without the Burst Fire feat; if you use the setting without the feat, you make a normal attack, and the extra two bullets are wasted.

All Elite models come equipped with an integral laser sighting system.

## Cameron & Sooch Model 6 Assault Rifle Series

NEUL



Until 2011, the Canadian armed forces used C7, C8 and C9 assault rifles that were a licensed version of the American M-16. During the period of de-standardization that occurred in the early 21st Century however, the Canadian Department of National Defence went looking for alternate weapon designs to replace their aging weapon systems.

The selection of the C&S Model 6 as the standard long arm of the armed forces was not much of a surprise to international observers. The design is a very conventional gas-powered select-fire action based almost entirely on the Eugene Stoner AR-15 design (used in the M-16 series of rifles). The bullpup frame, however, is reminiscent of the heavy structure of the British L85 / SA80 series of assault rifles (although the barrel is significantly shorter, reducing the overall length of the firearm to 70 cm (27 ½ inches) long. As with most other bullpup military rifles, significant effort went into the design to make sure that controls and grips are ergonomic, and unlike many, the ejection port can be switched from the right to left side with only a few seconds of work. The trigger and trigger-guard are exceptionally large, allowing for easy use while wearing heavy gloves. There is a double safety system, involving a standard ambidextrous safety along with a rear grip safety that prevents firing when the rifle is not held properly.

The controversy over the new Model 6 replacing the older C7s, C8s and C9s in Canadian service was not over the design of the Model 6, but over the chosen round to equip it in. The base model 6 is designed around a 7mm cased round that is basically a slightly more powerful version of the 5.56mm round. The controversy was two-fold as interoperability issues were immediately brought up by other NATO nations who use the NATO-standard 5.56mm rounds in all assault rifles, as well internal conflict over the inability to use the existing Canadian stockpiles of 5.56mm ammunition.

The controversy over the proposed adoption of the Model 6 encouraged the design team at Cameron & Sooch to search for their own answers. Finally, in early 2011, they announced that they could produce the Model 6B with interchangeable barrels and chambering allowing them to fire both 5.56mm NATO-standard ammunition as well as the new 7mm LR round. This ended internal debate on the issue, although NATO was still of the opinion that the adoption of the round was in violation of Canada's NATO treaties.

A majority of Model 6 assault rifles purchased by the Canadian armed forces were not the interchangeable Model 6B, but either 'plain jane' Model 6 units with some Model 6N units chambered in the NATO-standard 5.56mm. The reason for this is that the Model 6B



is significantly more expensive than either the 6 or the 6N, and saw only very limited acquisitions for use in areas where interoperability with both Canadian and foreign forces was necessary. Most peace-keeping forces were equipped with the 6N because they had to operate extensively with other NATO units.

In 2036, the Model 6 was replaced with the new Mark XII weapon system, a significant upgrade to the older C&S rifles. This has meant a large number of old Model 6 units are now moving into international arms channels, and a number are also being converted to semi-auto use only for sale to the civilian market.

A number of Model 6 variants have seen use over the years by the Canadian military, and a few new variants have come into existence since they began entering the civilian firearms market last year.

**C&S Model 6**: The classic Model 6 assault rifle is a fairly long rifle of no insignificant weight. The 2010 gasaction design is neither innovative nor particularly more effective than most other designs of its age. However, the 7mm LR round mated with the long barrel and heavy bullpup frame allow for exceptional accuracy at significant ranges.

**C&S Model 6B**: Released concurrently with the Model 6 for Canadian service in 2011, the Model 6B comes with barrels and receivers in both 5.56mm and 7mm LR. It takes roughly three minutes to switch the weapon from one round to the other. The Model 6B was only procured in very limited numbers and initially cost nearly twice the price of the Model 6, therefore those remaining are very expensive to acquire, if they can be found at all.

**C&S Model 6N**: Also released concurrently with the Model 6 for Canadian service in 2011, the Model 6N is effectively identical to the Model 6, but is chambered in 5.56mm NATO and can use M16 standard magazines.

**C&S Model 6N1**: The civilian edition of the C&S Model 6N is functionally identical to the military model, but is only capable of semi-automatic fire. It is the only version of the Model 6 that was factory-set for semi-automatic fire only. It saw limited adoption into the civilian market as a hunting rifle. The high price has kept the 6N1 from widespread adoption, although many after-market modifications to the military models have now entered the market with lower prices and identical functionality to the 6N1.

**C&S Model 62**: The new civilian edition of the Model 6 is a retrofit to the service Model 6, converting the weapon from select-fire to semi-automatic fire. In all other respects, this weapon is identical to the Model 6. Because the Model 62s are almost entirely refitted service weapons, the price is much lower than a new Model 6 would be. The Model 62 is more common and in less demand than the Model 62N, because the 7mm round is less commonly available to the civilian market.

**C&S Model 62N**: The 62N is the civilian-service retrofit of the Model 6N. It has been modified to only fire in semi-automatic mode, and is chambered in the NATO-standard 5.56mm round. This is the most indemand of the civilian re-issues of the service-model C&S rifles, and is exported internationally as a hunting rifle.

**C&S Model 6A**: The Model 6A entered into service the year after the Model 6. Still chambered in 7mm x 46mm, the rifle is reduced in length and weight to make it a more serviceable weapon in close-combat



situations. For this redesign, only the barrel and forestock were shortened, reducing the total length of the Model 6A to 61 cm (24 inches) in length from tip to stock. This reduces long range accuracy, but results in a shorter and lighter weapon that is easier to handle in urban fighting and easier to carry for extended patrols. The Model 6A was adopted into service for officers, some rear-echelon troops, and for urban patrols. The 6A is not available in a 5.56mm NATO chambering.

**C&S Model 6X**: The Model 6X entered into service the same year as the 6A. The Model 6X is a full-length Model 6 design, but also comes standard with a forward Harris bipod that mounts to the front of the foregrip frame, reconfigured stock furniture for improved accuracy and comfort for long distance shooting, and a variety of high-powered sighting systems mounted on the top of the gun. Unlike most sniper rifles, the 6X is still a select-fire weapon capable of high-precision semi-automatic fire as well as three-shot bursts and full automatic fire. The Model 6X was only requisitioned in limited numbers because Canadian special forces were still using a modernized Parker-Hale Model 85 until the introduction of the Mark XII. The Model 6X was issued individually to standard infantry squads, to designated sharpshooters in order to serve in the counter-sniper role during standard engagements.

C&S Model 7: A submachine gun variant of the Model 6, the Model 7 exists in two versions. About a third of Model 7s are factory-designated Model 7 units, while the remaining two-thirds are factory-designated Model 6 units that were then converted to operate as Model 7s by military armouries or after-market conversions by Cameron & Sooch gunsmiths and some independent gunsmith operations. The Model 7 is chambered in 10mm ACP, a popular submachine gun round in the early years of the Century. The rear shoulder stock and associated furniture have been removed from the design, and the foregrip and barrel have been further shortened, bringing the total length of the Model 7 down to 57cm (22 1/2 inches). Also notable is the addition of a forward pistol grip to maintain controllability of the weapon in autofire.





**C&S Model 7C "Commando"**: A complete rebuild of the Model 7, the 7C is a further 4 cm shorter in overall length. This time, the reduced length came from the reduction of the receiver unit itself, shortening the stroke of the gas action and thus increasing the native rate of fire. In order to control the increased cyclic rate, an electronic catch was added to the action that holds the bolt back for a fraction of a second each cycle in order to reduce the rate of fire to a rate slightly lower than the native Model 7. This makes the Model 7C even more easily controlled than the Model 7.

**C&S Model 7SD**: Further shortening the receiver unit and rechambering the Model 7C in 9mm, the Model 7SD is once a gain a complete remake of the basic Model 6 design. The Model 7SD is so designated because it is a suppressed model, with a built-in silencer hidden within the large polymer grip-frame of the series. The silencer can be removed rapidly by unscrewing it, allowing for unsilenced operation, or in order to switch silencers.

### d20 Rules

The model 6, 6B, 6N, 6A, 6X, 7, 7C and 7SD each feature a three-round burst setting. Whenused with the Burst Fire feat, it fires only three bullets instead of five and can be used with only three bullets in the weapon.

The Model 7C and Model 7SD each grant a +2 circumstance bonus on Sleight of Hand checks made to conceal the weapon.

Weapon	Damage	Crit	Туре	Range	ROF	Mag	Size	Wt	Cost	Res
C&S Model 6	2d8+1	20	Ballistic	80 ft.	S,A	30 box	Large	10 lb.	18	Res (+2)
C&S Model 6B	2d8+1	20	Ballistic	80 ft.	S,A	30 box	Large	10 lb.	21	Res (+2)
C&S Model 6N	2d8	20	Ballistic	80 ft.	S,A	30 box	Large	10 lb.	18	Res (+2)
C&S Model 6N1	2d8	20	Ballistic	80 ft.	S	30 box	Large	10 lb.	20	Lic (+1)
C&S Model 62	2d8+1	20	Ballistic	80 ft.	S	30 box	Large	10 lb.	17	Lic (+1)
C&S Model 62N	2d8	20	Ballistic	80 ft.	S	30 box	Large	10 lb.	17	Lic (+1)
C&S Model 6A	2d8+1	20	Ballistic	60 ft.	S,A	30 box	Large	9 lb.	18	Res (+2)
C&S Model 6X	2d8+1	20	Ballistic	90 ft.	S,A	30 box	Large	11 lb.	20	Res (+2)
C&S Model 7	2d6	20	Ballistic	60 ft.	S,A	30 box	Large	7 lb.	18	Res (+2)
C&S Model 7C "Commando"	2d6	20	Ballistic	60 ft.	S,A	30 box	Large	6 lb.	18	Res (+2)
C&S Model 7SD	2d6	20	Ballistic	50 ft.	S,A	30 box	Large	6 lb.	20	Mil (+3)



The original Ingram submachine guns were designed by Gordon Ingram in the 1960's and were made famous by the 1969 Ingram Model 10. Later combined with the silencer genius of Mitchell Livingston WerBell III, the M-10 machine pistol design was sold to MAC (Military Armaments Company) where it became the MAC-10. Unfortunately WerBell and Ingram lost control of the company and design at this time and were removed from the operation entirely.

With the re-emergence of Military Armaments Company as a subsidiary of the lesser-known American firearms firm, Cobray in Stephensville, Texas, the Ingram line of submachine guns was reincarnated in the new millennium.

In 2012, MAC relaunched limited production runs (mostly for collectors) of the classic MAC-10 and MAC-

11 submachine guns. The emphasis of the company, however, has moved on to innovative product lines for sale to corporate security forces and military special operations teams. Since the Model 21 release in 2011, all MAC submachine guns have been released using the Ingram name, even though Gordon Ingram had passed away before the design process had begun, let alone the release of the firearm proper.

The most recent and successful of these Ingram submachine guns is the Model 99 series.

The Ingram Model 99 uses the recently developed Benelli 11.5mm Caseless handgun load. This large round has a hollow base into which is mounted a TDXbased explosive used to fire the round. The round has excellent performance characteristics and is quite heavy, on par performance-wise with the traditional cased (and much longer) .44 Magnum round.





The basic design of the 99 is fairly typical of an Ingram design, internally at least. The submachine gun uses a minimum of moving parts and a firing pin milled in to the body of the bolt near the rear part of the bolt that "sleeves" the rear part of the barrel. The only major difference from most Ingram designs is the acute angle of the magazine which requires the feed to strip the round up and into the chamber for firing. This significantly increases the size of the receiver. The gun cycles at a very rapid 1800 RPM natively, but an electronic bolt-restraint system reduces the rate of fire to a much more controlled 450 RPM. The bolt-restraint system can be disabled completely, or set to increased or decreased delays by a competent gunsmith.

The 99 is capable of firing in either semiautomatic or fully automatic modes, with a mode selector placed just above the grip-frame for easy selection using the thumb. The magazine eject is however much more difficult to trigger, as it is set on the underside of the receiver behind the magazine. Combined with the bullpup design, the Model 99 is somewhat difficult to reload rapidly.

The majority of the design is stamped and milled steel, with the lower assembly and grip frame being made of lighter high-impact polymer. The magazines are made of translucent lexan with a heavy black polymer base. The translucent magazines allow for the user to easily check his ammunition supply, however the enclosed magazine well makes it impossible to do so with the magazine loaded.

Because of the bullpup design and the large stamped-steel receiver, the model 99 is very backheavy. Although this would seem to promote using the firearm single-handed, the recoil ends up driving the butt of the gun down, thus raising the barrel. This counters much of the benefit of a bullpup design, but is easily controlled with a two-handed stance. The carrying handle and sight rail further compounds the problem, as the centre of balance of the gun is towards the back, and holding it by the handle for any length of time is quite uncomfortable and awkward.

Several variants of the Ingram Model 99 are currently in production and use world-wide. The base unit is still the primary item being sold to corporate security and used in the defence of naval assets in New Zealand. This model is typical of the Model 99 series, with the longest barrel of the submachine guns in the series, and a forward assault grip to help control recoil.

A civilian model of the Model 99, the Model 99C was produced on a limited basis, but was discontinued because of a lack of sales. The 99C carbine removes the fire-selector completely, moves the safety to an ambidextrous safety switch just above and forward of the trigger, and incorporates a longer barrel. The major cosmetic difference is the removal of the carrying handle and sight rail, replaced with more traditional iron sights.

The Ingram Model 99 Navy was designed and released two years ago for a bid for the African Union's naval forces. It has the same design as the Model 99, but includes a four-position rotating selector switch for safe, single shot, 3-shot burst and full autofire as opposed to the two-position sliding switch on the standard models. In addition, the Navy model has cut-away panels on the magazine well, allowing the user to visually check his ammunition supply in a loaded magazine. Although the AU naval trials are not yet over, this model has been purchased by several security forces worldwide, especially by State-operated police forces where it is being adopted as a light support system.

Damage	Crit	Туре	Range	ROF	Mag	Size	Wt	Cost	Res
2d8	20	Ballistic	60 ft.	S, A	30 box	Large	5 lb.	19	Res (+2)
2d8	20	Ballistic	60 ft.	S	30 box	Large	5 lb.	18	Lic (+1)
2d8	20	Ballistic	60 ft.	S, A	30 box	Large	5 lb.	20	Res (+2)
2d8	20	Ballistic	50 ft.	S, A	30 box	Large	5 lb.	19	Res (+2)
2d8	20	Ballistic	50 ft.	S, A	30 box	Large	6 lb.	23	Mil (+3)
2d8	20	Ballistic	50 ft.	S, A	30 box	Large	6 lb.	24	Mil (+3)
	2d8 2d8 2d8 2d8 2d8 2d8	2d8 20   2d8 20   2d8 20   2d8 20   2d8 20   2d8 20   2d8 20	2d820Ballistic2d820Ballistic2d820Ballistic2d820Ballistic2d820Ballistic2d820Ballistic	2d8   20   Ballistic   60 ft.     2d8   20   Ballistic   60 ft.     2d8   20   Ballistic   60 ft.     2d8   20   Ballistic   50 ft.     2d8   20   Ballistic   50 ft.     2d8   20   Ballistic   50 ft.	2d8   20   Ballistic   60 ft.   S, A     2d8   20   Ballistic   60 ft.   S     2d8   20   Ballistic   60 ft.   S, A     2d8   20   Ballistic   60 ft.   S, A     2d8   20   Ballistic   50 ft.   S, A     2d8   20   Ballistic   50 ft.   S, A     2d8   20   Ballistic   50 ft.   S, A	2d8   20   Ballistic   60 ft.   S, A   30 box     2d8   20   Ballistic   60 ft.   S   30 box     2d8   20   Ballistic   60 ft.   S, A   30 box     2d8   20   Ballistic   60 ft.   S, A   30 box     2d8   20   Ballistic   50 ft.   S, A   30 box     2d8   20   Ballistic   50 ft.   S, A   30 box     2d8   20   Ballistic   50 ft.   S, A   30 box	2d820Ballistic60 ft.S, A30 boxLarge2d820Ballistic60 ft.S30 boxLarge2d820Ballistic60 ft.S, A30 boxLarge2d820Ballistic50 ft.S, A30 boxLarge2d820Ballistic50 ft.S, A30 boxLarge2d820Ballistic50 ft.S, A30 boxLarge	2d8   20   Ballistic   60 ft.   S, A   30 box   Large   5 lb.     2d8   20   Ballistic   60 ft.   S   30 box   Large   5 lb.     2d8   20   Ballistic   60 ft.   S, A   30 box   Large   5 lb.     2d8   20   Ballistic   60 ft.   S, A   30 box   Large   5 lb.     2d8   20   Ballistic   50 ft.   S, A   30 box   Large   5 lb.     2d8   20   Ballistic   50 ft.   S, A   30 box   Large   5 lb.     2d8   20   Ballistic   50 ft.   S, A   30 box   Large   6 lb.	2d8 20 Ballistic 60 ft. S, A 30 box Large 5 lb. 19   2d8 20 Ballistic 60 ft. S 30 box Large 5 lb. 18   2d8 20 Ballistic 60 ft. S, A 30 box Large 5 lb. 18   2d8 20 Ballistic 60 ft. S, A 30 box Large 5 lb. 20   2d8 20 Ballistic 50 ft. S, A 30 box Large 5 lb. 19   2d8 20 Ballistic 50 ft. S, A 30 box Large 6 lb. 23

The Ingram Model 99 TX is the shortest of the Model 99 variants, with the barrel shortened a full 7 inches and the complete removal of the front grip. The TX exacerbates the issues of the rear-heaviness of the design, providing no additional point to hold the firearm while using it in full automatic fire. The design also does not come with a three-shot burst mode (as seen on the 99 Navy), thus recoil can become a serious issue. Most users of this model place their left hand on the receiver above the grip frame, under the carrying handle in order to help control the movement of the gun.

YELL

Finally, the Model 99 SD was developed for special forces and security personnel. The design is based on the 99 TX, but incorporates an integrated suppressor system to reduce the sounds created by the Model 99 in action. This suppressor returns the SD to the full length of the base design and provides a second point of contact when firing the gun. There is also word of a Model 99 SD Navy which incorporates the changes in the Navy design with the SD model suppressor. On both these models, the suppressor can be unscrewed and removed, leaving the suppressor shroud in place and an extended, vented barrel within the shroud. With the suppressor removed, the SD model sounds the same as any other Model 99.

### d20 Rules

The Model 99 Navy and the Model 99 SD Navy both have three-round burst settings. When used with the Bust Fire feat, these weapons fire only three bullets instead of five and can be used with only three bullets in the weapon. The setting does not grant the ability to make burst fire attacks without the Burst Fire feat; if you use the setting without the feat, you make a normal attack, and the extra two bullets are wasted.

The Model 99 SD and Model 99 SD Navy are silenced weapons. A successful Listen check (DC 15) is required to notice the sound of the weapon firing.

The purchase DC on a box of 20 11.5mm caseless rounds is DC 6.



## Layout, Art, Concept & Design by **M Jason Parent**

NEUL

### New Tribes Developers Denise Robinson M Jason Parent

"d20 System" and the "d20 System" logo are Trademarks owned by Wizards of the Coast, Inc. and are used according to the terms of the d20 System Trademark License version 6.0. A copy of this License can be found at www.wizards.com/d20.

Dungeons & Dragons® and Wizards of the Coast® are Registered Trademarks of Wizards of the Coast, Inc. in the United States and other countries and are used with Permission.

Some content included herein is derivative of existing Open Game Content as indicated in the Section 15 of the Open Game License included at the end of this document. All contents, regardless of designation, are ©2004 M Jason Parent & E.N. Publishing. This edition of Blackhammer Firearms is produced under version 1.0a of the Open Game License, version 6.0 of the d20 System Trademark License and the current version of the System Reference Document and Modern System Reference Document by permission of Wizards of the Coast; subsequent editions of this product will incorporate the most current versions of the license, guide and document.

Declaration of Open Game Content: All text in this volume except for all E.N. Publishing logos, trademarks, product names and product lines is released as Open Game Content under the terms of the Open Game License version 1.0a.

© 2004 E.N. Publishing

#### **OPEN GAME LICENSE Version 1.0a**

The following text is the property of Wizards of the Coast, Inc. and is Copyright 2000 Wizards of the Coast, Inc ("Wizards"). All Rights Reserved.

1. Definitions: (a)"Contributors" means the copyright and/or trademark owners who have contributed Open Game Content; (b)"Derivative Material" means copyrighted material including derivative works and translations (including into other computer languages), potation, modification, correction, addition, extension, upgrade, improvement, compilation, abridgment or other form in which an existing work may be recast, transformed or adapted; (c) "Distribute" means to reproduce, license, rent, lease, sell, broadcast, publicly display, transmit or otherwise distribute; (d)"Open Game Content" means the game mechanic and includes the methods, procedures, processes and routines to the extent such content does not embody the Product Identity and is an enhancement over the prior art and any additional content clearly identified as Open Game Content by the Contributor, and means any work covered by this License, including translations and derivative works under copyright law, but specifically excludes Product Identity. (e) "Product Identity" means product and product line names, logos and identifying marks including trade dress; artifacts; creatures characters; stories, storylines, plots, thematic elements, dialogue, incidents, language, artwork, symbols, designs, depictions, likenesses, formats, poses, concepts, themes and graphic, photographic and other visual or audio representations; names and descriptions of characters, spells, enchantments, personalities, teams, personas, likenesses and special abilities; places, locations, environments, creatures, equipment, magical or supernatural abilities or effects, logos, symbols, or graphic designs; and any other trademark or registered trademark clearly identified as Product identity by the owner of the Product Identity, and which specifically excludes the Open Game Content; (f) "Trademark" means the logos, names, mark, sign, motto, designs that are used by a Contributor to identify itself or its products or the associated products contributed to the Open Game License by the Contributor (g) "Use", "Used" or "Using" means to use, Distribute, copy, edit, format, modify, translate and otherwise create Derivative Material of

### BlackHammer Firearms 1 - Page 14

Open Game Content. (h) "You" or "Your" means the licensee in terms of this agreement.

2. The License: This License applies to any Open Game Content that contains a notice indicating that the Open Game Content may only be Used under and in terms of this License. You must affix such a notice to any Open Game Content that you Use. No terms may be added to or subtracted from this License except as described by the License itself. No other terms or conditions may be applied to any Open Game Content distributed using this License.

3.Offer and Acceptance: By Using the Open Game Content You indicate Your acceptance of the terms of this License.

4. Grant and Consideration: In consideration for agreeing to use this License, the Contributors grant You a perpetual, worldwide, royalty-free, non-exclusive license with the exact terms of this License to Use, the Open Game Content.

5.Representation of Authority to Contribute: If You are contributing original material as Open Game Content, You represent that Your Contributions are Your original creation and/or You have sufficient rights to grant the rights conveyed by this License.

6.Notice of License Copyright: You must update the COPYRIGHT NOTICE portion of this License to include the exact text of the COPYRIGHT NOTICE of any Open Game Content You are copying, modifying or distributing, and You must add the title, the copyright date, and the copyright holder's name to the COPYRIGHT NOTICE of any original Open Game Content you Distribute.

7. Use of Product Identity: You agree not to Use any Product Identity, including as an indication as to compatibility, except as expressly licensed in another, independent Agreement with the owner of each element of that Product Identity. You agree not to indicate compatibility or co-adaptability with any Trademark or Registered Trademark in conjunction with a work containing Open Game Content except as expressly licensed in another, independent Agreement with the owner of such Trademark or Registered Trademark. The use of any Product Identity in Open Game Content does not constitute a challenge to the ownership of that Product Identity. The owner of any Product Identity used in Open Game Content shall retain all rights, title and interest in and to that Product Identity.

8. Identification: If you distribute Open Game Content You must clearly indicate which portions of the work that you are distributing are Open Game Content.

9. Updating the License: Wizards or its designated Agents may publish updated versions of this License. You may use any authorized version of this License to copy, modify and distribute any Open Game Content originally distributed under any version of this License.

10. Copy of this License: You MUST include a copy of this License with every copy of the Open Game Content You Distribute.

11. Use of Contributor Credits: You may not market or advertise the Open Game Content using the name of any Contributor unless You have written permission from the Contributor to do so.

12. Inability to Comply: If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Open Game Content due to statute, judicial order, or governmental regulation then You may not Use any Open Game Material so affected.

13. Termination: This License will terminate automatically if You fail to comply with all terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses shall survive the termination of this License.

14. Reformation: If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

#### **15. COPYRIGHT NOTICE**

Open Game License v 1.0a Copyright 2000, Wizards of the Coast, Inc. System Reference Document Copyright 2000-2003, Wizards of the Coast, Inc.; Authors Jonathan Tweet, Monte Cook, Skip Williams, Rich Baker, Andy Collins, David Noonan, Rich Redman, Bruce R. Cordell, based on original material by E. Gary Gygax and Dave Arneson.

Modern System Reference Document Copyright 2002, Wizards of the Coast, Inc.; Authors Bill Slavicsek, Jeff Grubb, Rich Redman, Charles Ryan, based on material by Jonathan Tweet, Monte Cook, Skip Williams, Richard Baker, Peter Adkison, Bruce R. Cordell, John Tynes, Andy Collins, and JD Wiker.

New Tribes Copyright 2004, E.N.Publishing; M Jason Parent & Denise Robinosn

BlackHammer Firearms 2: Cutting Edge Ballistics Copyright 2004, E.N.Publishing; M Jason Parent