

Military Sniper Combat Use of Open Tip Match Ammunition

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When is a 'hollow point' not a hollow point? The curious history of military acquisition and combat use of open tip match (OTM) ammunition

History

- **1950s: Bullet maker Sierra Bullets introduced MatchKing™ “boat tail hollow point” bullet for competitive rifle shooting.**

A word can have different meanings

British English

- To ‘table’: “to lay (an appeal, proposal, resolution, bill, etc.) on the table of a deliberative or legislative assembly; hence to bring forward or submit for discussion or consideration.”

American English

- To ‘table’: “to lay on the table as a way of postponing indefinitely; to shelve; to remove from consideration indefinitely.”

Sources: COMPACT EDITION OF THE OXFORD ENGLISH DICTIONARY (1971); WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY (1986)

The open tip design employs a precision deep drawn jacket with lead inserted from the front tip and ogival forming from the open tip mouth. The result is better manufacturing control and more consistent quality than possible with traditional full metal jacket (FMJ) bullet designs formed from tip to base.

Minimizing the meplat minimizes aerodynamic drag, preserving velocity, reducing time of flight, and providing a high quality flatter shooting bullet.

Words can have different meanings

Manufacturer (Sierra Bullets)

- “Hollow point”: describes the physical design or appearance of the bullet, not necessarily its terminal ballistics.

International lawyers and military

- “Hollow point”: refers to bullets *believed* to be prohibited by the 1899 Hague Declaration on Expanding Bullets.

Misunderstanding of this distinction resulted in three decades of military hesitation to employ a more accurate projectile.

History (cont.)

- Following its debut, MatchKing™ soon dominated centerfire rifle competition.
- September 4, 1980: Army Marksmanship Unit requests legal review by Judge Advocate General of the Army of MatchKing to determine if it can be used by military for competition.
- Legal review required to ensure compliance with U.S. treaty obligations.

1899 Hague Declaration

- Prohibits “bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not not entirely cover the core or is pierced with incisions”.
- Declaration contains examples of expanding bullet design and describes intended terminal ballistics effects.
- ‘*Hollow point*’ is not expressly used in the Declaration.
- *The Declaration prohibits bullets that expand or flatten easily, not all hollow point bullets.*

Which bullet is a 'hollow point'?

Sierra GameKing

- ◆ Purpose: hunting
- ◆ Larger aperture
- ◆ Larger core cavity
- ◆ Skiving
- ◆ Expands easily on impact with soft tissue



Sierra MatchKing

- ◆ Purpose: Long range accuracy.
- ◆ Smaller core cavity
- ◆ No skiving
- ◆ Terminal ballistics same as M80 Ball.
- ◆ Sierra expressly recommends against use for hunting.

The criteria for legality is what a bullet is intended to do and its terminal ballistics, not its external appearance.

“Individuals judging the MatchKing™ solely on its appearance failed to consider the foundation law of war principle of *distinction*. It obligates a government and its military to develop and apply force against an enemy military in a manner that limits risk of injury to innocent civilians. A well-trained military sniper equipped with a contemporary sniper rifle, including its optics, using the most accurate ammunition, is the epitome of *distinction*.”

-- “Open Tip Match – When a “hollow point” is not a hollow point”, *Small Arms Defense Journal*, Vol. 4, No. 2 (2012)

History (cont.)

- **Army evaluation of MatchKing™ (M852):**
 - **36% increase in accuracy at 300 meters over existing match-grade ammunition (M118).**
 - **32% accuracy increase at 600 meters.**
- **Marine Corps M852 evaluation:**
 - **28% accuracy improvement at 300 meters.**
 - **20% accuracy improvement at 600 meters.**
 - **National Guard: M852 provided better groups at 200 and 600 yards under all conditions compared to M118.**

History (cont.)

- **September 4, 1980: Army Marksmanship Unit requests legal review of MatchKing to determine if it can be used by military for competition.**

- **September 11, 1980: Army JAG legal review referred to MatchKing as “open point” rather than “hollow point” because it was not designed to have terminal ballistics prohibited by 1899 Hague Declaration.**

Army JAG legal review conclusion: Approved for competition. If it's that good, request for legal review for combat use would receive positive response as well.

1980: Open Tip Match (M852) approved for military use in competition



- **Box marked “Not for Combat Use”**
- **Army Marksmanship Unit (AMU) did not follow up on suggestion to request combat use, apparently due to AMU’s limited focus on competitive shooting.**

History (cont.)

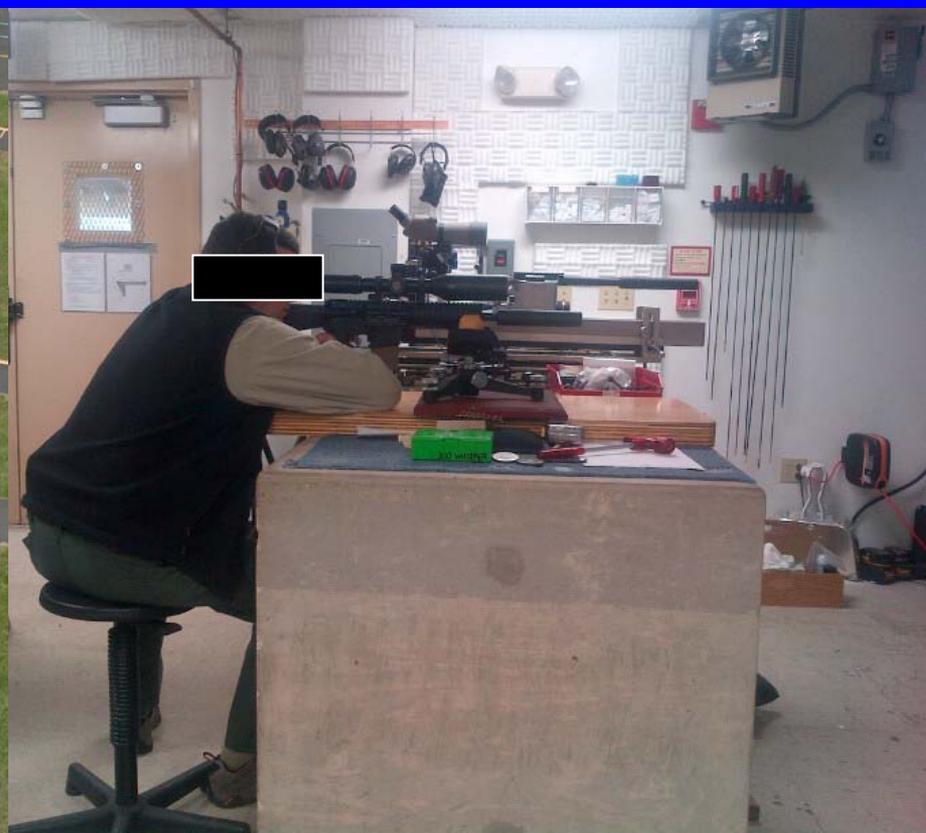
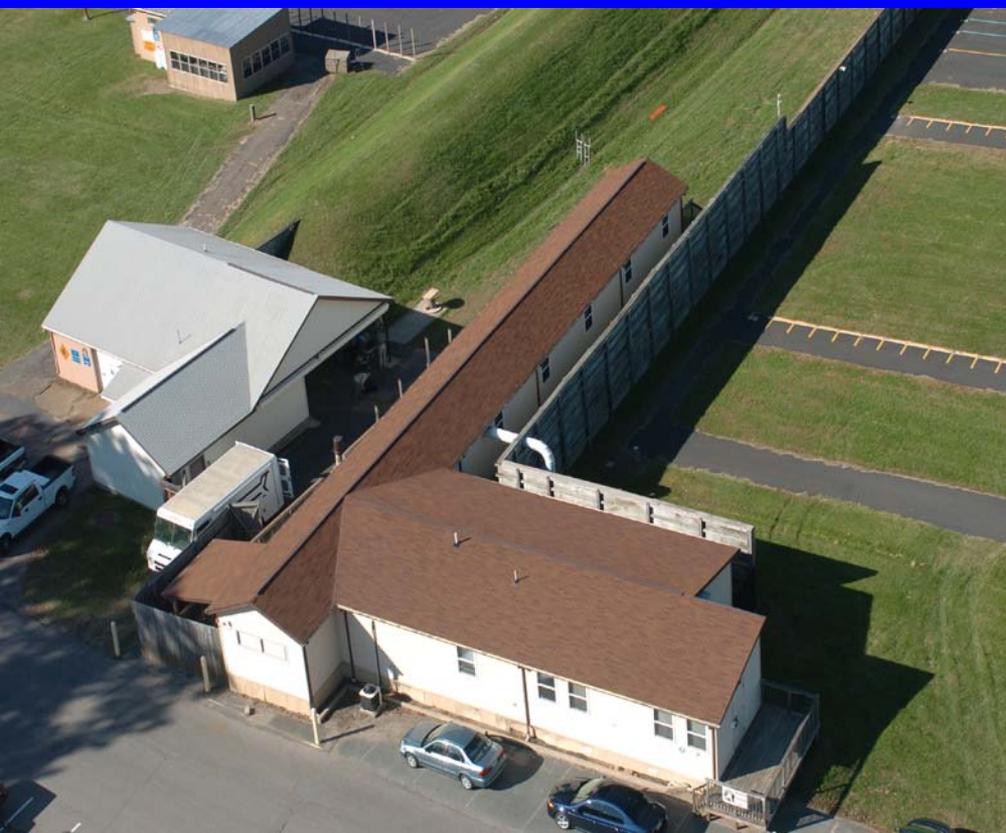
- **September 25, 1985:** Army JAG prepared *sua sponte* legal opinion and coordinated with State Department, Navy and Air Force JAG advising 168-gr. MatchKing™ (M852) was lawful for combat use.
 - Opinion applied to use by military snipers in all four services.
- **1988:** Apparently unaware of 1985 legal approval, Navy purchased 200,000 7.62x51mm and 80,000 .300 Winchester Magnum MatchKing projectiles with polished closed tips in the hope that closing the tip would permit combat use.
- **October 12, 1990:** In build-up for Coalition operations to liberate Kuwait following Iraqi invasion and occupation, U.S. Army request for sniper combat use of M852 received by Judge Advocate General and answered favorably the same day.
- **Services' hesitation in making request negated official use in Operation DESERT STORM.**

Open Tip Match legal reviews (approving combat use)

- **1990: 7.62mm 168-grain M852**
- **1993: .300 Winchester Magnum 190-grain MK 248**
- **1997: 7.62mm 175-grain M118LR**
- **2000: 5.56mm 77-grain MK 262**
- **2002: 5.56mm 77-grain Nosler (cannelured)**
- **2003: .338 Lapua Magnum Scenar**
- **2005: 7.62mm 155-grain**
- **2011: 175-grain SMK 316, MOD 0, 7.62mm Special Ball, Long Range**
- **2011: .300 Winchester Magnum MK 248 MOD 1**
(Sierra MatchKing™ bullets unless otherwise noted)

“Trust but verify”

-- President Ronald Reagan



Any proposed military ammunition undergoes independent ballistics test and evaluation at FBI Academy’s Ballistics Research Facility as part of legal review.

“Trust but verify” -- why

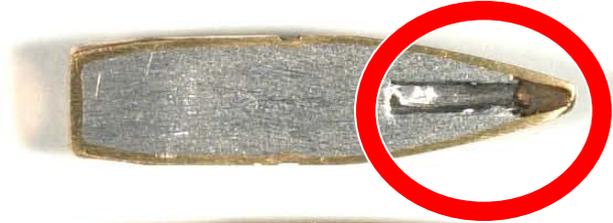
5.56x45mm

.22 77 grain Sierra Matchking



6.8x43mm

.277 115 grain Hornady OTM



7.62x51mm

.308 175 grain Sierra Matchking



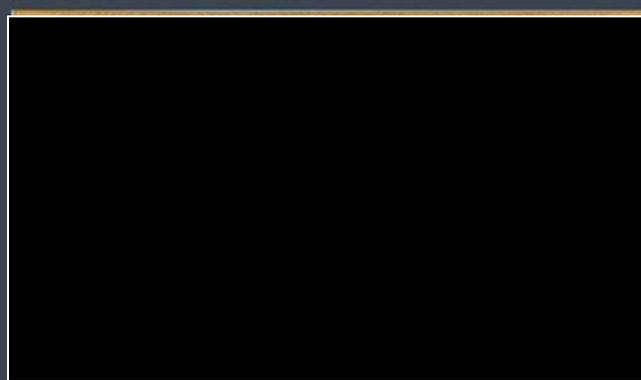
- **September 15, 2003: Following ballistics tests at FBI BRF, Army JAG prepared favorable legal review for 6.8x43mm Special Purpose Cartridge proposed by 5th Special Forces Group.**
- **Request made that FBI BRF section production bullets.**
- **Sectioning revealed deep cavity not in original test ammunition.**
- **Army JAG favorable legal review rescinded.**
- **All projectiles since 2003 have been sectioned for examination as part of legal review process.**

Open Tip Match approval



- **1980: Open tip match ammunition approved for competition.**
- **1985: Open tip match ammunition approved for sniper use in combat.**

Open tip match confusion, Iraq, 2006: Murphy's Law is alive and well



Open tip match confusion: problem resolved



Corrected box

When is a ‘hollow point’ not a ‘hollow point’ for 1899 Hague Declaration purposes?

Answer: When it is a bullet that

• Is not designed to open or expand easily in soft tissue

□ Has received a favorable legal review by competent authority.

Lesson # 1: Don't judge a book by its cover, or a bullet solely by its appearance.

Lesson # 2: Legal reviews are like ‘Forever’ stamps. They do not have a ‘shelf life’.

Questions?

