



CBJ Tech – Test protocol

6.5x25 CBJ

Accuracy at 25m range



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Date: 2020-01-30	Location: Outdoor shooting range, roof over shooting position	Weather conditions: Light rain, +6 deg C
Weapon systems tested: Glock 17 gen 3 in 6.5x25 CBJ, BT MP9 in 6.5x25 CBJ and HK MP7 in 4.6x30.		
Ammunition tested: 6.5x25 CBJ HET and 4.6x30 NM257 (Nammo).		
Targets tested: IPSC paper targets at 25m range.		
People present: Mikael Johansson, Bertil Johansson		
Additional information:		

Background, Purpose and Goal

This was a simple test to evaluate the accuracy of the different types of ammunition in the specified weapon systems.

Test Setup

The IPSC paper targets were placed on the shooting range in front of the bullet trap and fitted with orange target dots to visually aid the aiming.

The shooting position was sitting on chair with support pillow, at 25m range.

The HK MP7 and the BT MP9 had Aimpoint red dot sights fitted, which was set to minimal visible brightness to reduce dot size and increase accuracy.

The Glock 17 had standard, non-optical, sights.

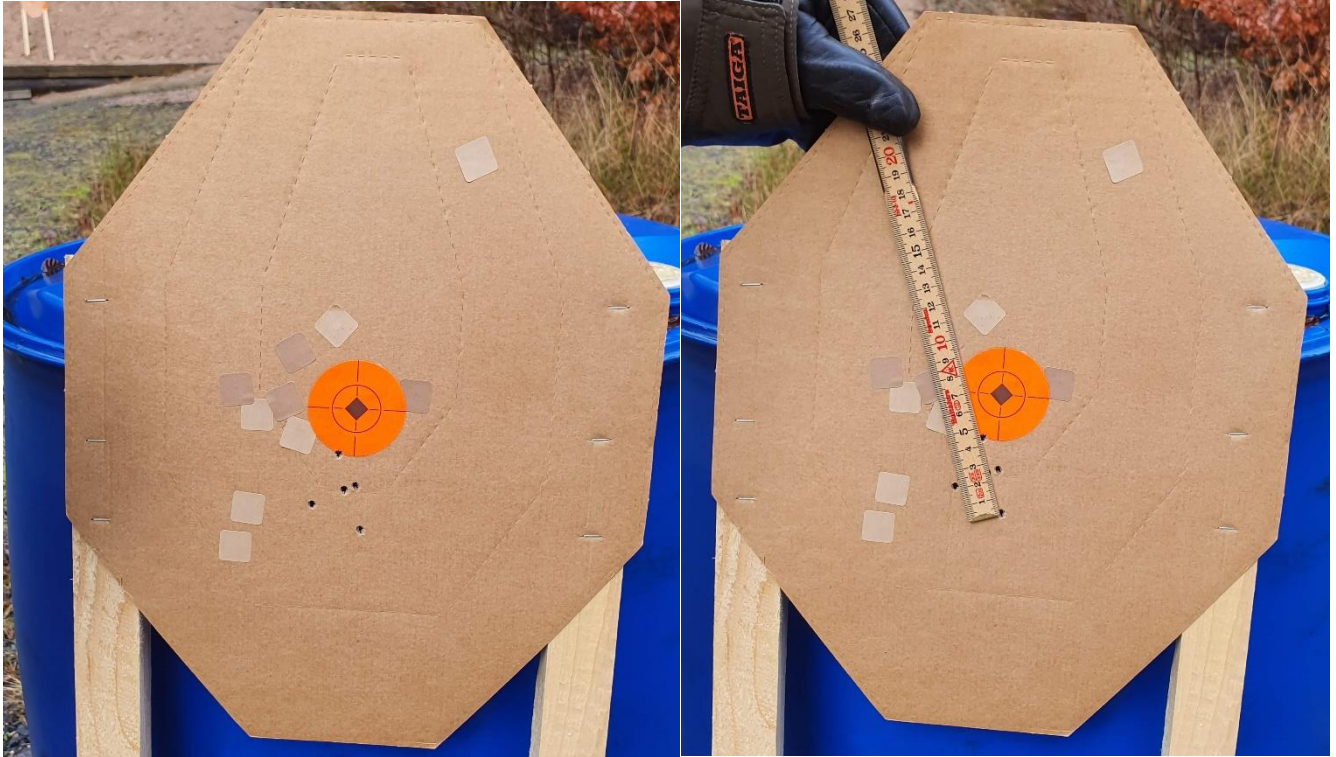
5 shot series were shot with all weapons.



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Results

Test 1: HK MP7 with 4.6x30 NM257

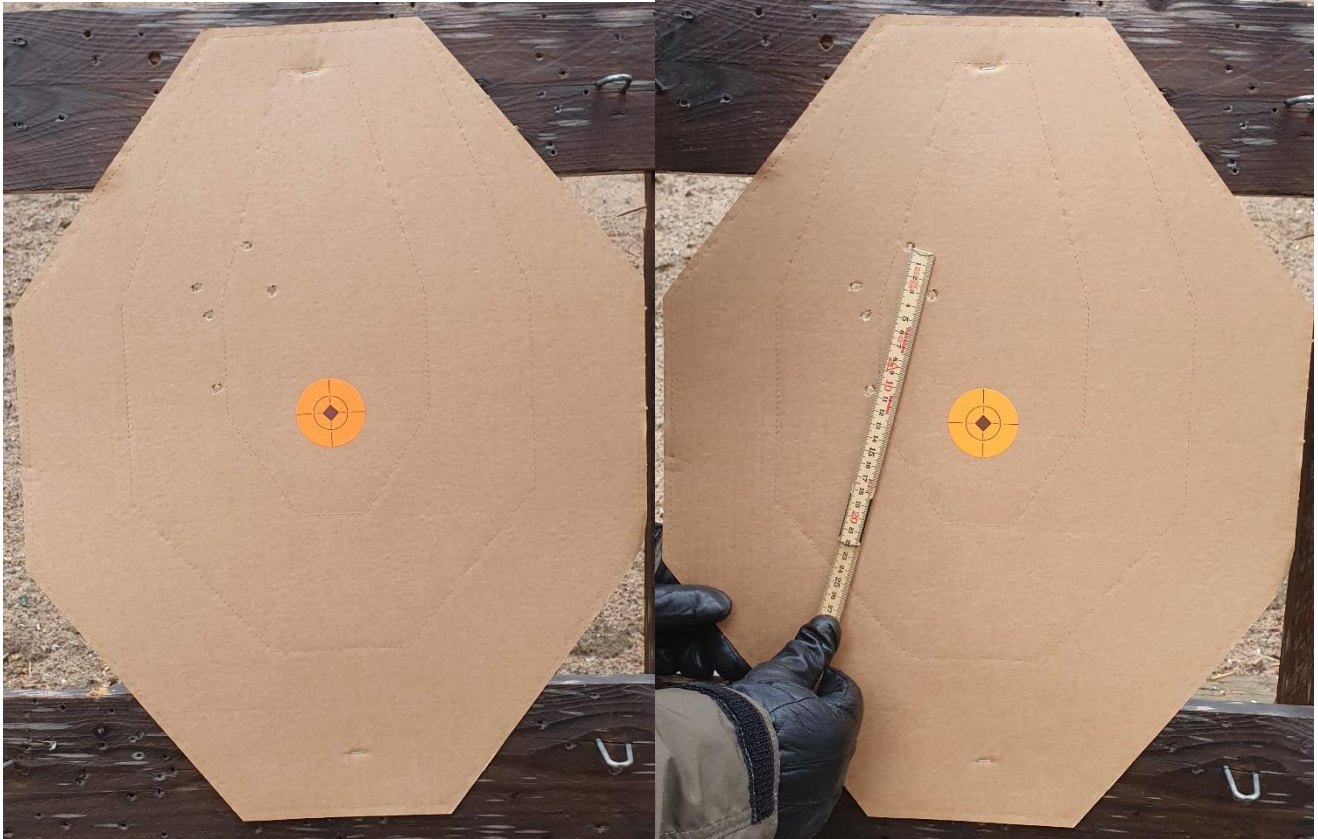


The largest pattern diameter was 44mm. Some of the holes were not round, which indicates unstable projectiles at 25m range. Any muzzle wobble should have stabilized at this range in order to have good accuracy at longer ranges.

The barrel length of the HK MP7 is 180mm.

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Test 2: Glock 17 gen 3 with 6.5x25 CBJ HET



The largest pattern diameter was 107mm. All holes were round, indicating stable projectiles.

The barrel length of the Glock 17 in 6.5x25 CBJ is 114mm.

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Test 3: BT MP9 with 6.5x25 CBJ HET



The largest pattern diameter was 25mm. All holes were round, indicating stable projectiles. The upper left hole is a double hole.

The barrel length of the BT MP9 is 150mm.

Summary

The 4,6x30 projectiles shot from the tested HK MP7 were not stable at 25m range. It is unknown if this is normal for this weapon system and ammunition, or if this sample is not performing properly. Unstable projectiles are never a good basis for good accuracy, so it may be that this test showed a somewhat larger hit pattern than typical.

The pattern size of the Glock pistol was somewhat larger than expected, but comparable to the pattern size of 9x19mm ammunition fired under the same conditions in the same weapon. The mechanical sights had a disadvantage in these weather/light conditions compared to the red dot sights on the HK MP7 and BT MP9.

The BT MP9 performed very well in this test. Compared to the HK MP7, the BT MP9 had almost half the hit pattern size, while at the same time being smaller and lighter. The muzzle velocity of the 6.5x25 CBJ HET is 780m/s from this weapon, and the projectile weight of the 6.5x25 CBJ HET is 2,5g. The 4,6x30 on the other hand has a muzzle velocity of 680m/s and a projectile weight of 2g.