

# **The P.Round™ Tactical Projectile**

## **A New Generation of OC Filled Rounds**

By Albert Y. C LEE  
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### **Use of Force Continuum – The Key to Survival for Law Enforcement Officers**

The Use of Force Continuum was designed to give officers some guidelines to understand the various levels of subject resistance and the appropriate subject control response. It is a series of closely linked and escalating options open to the officer at scene. Use of Force action is reactionary, and dependant upon the resistive actions of the subject, the officer's perception of threat and the officer's knowledge of his/her own abilities. The subject may enter the continuum at any level while the officer, in order to exercise control, is justified in using a level of force greater than that being offered by the subject - the "One Up" principle.

### **The Less-than Lethal Option Available**

The less-than lethal option plays a very important role in an officer's street survival. International-wise, OC (pepper) spray, baton and even stun guns are utilized in many cases. These less-than lethal weapons have been proved to be a success. However, these traditional weapons has limited to the close quarter combat situation which may put the officer in vulnerable situation as the officer is too close to the suspect(s). For example, the maximum effect range of the TASER is ranging from 5 to 7 meters depending on the target size.

The increase of such safety zone for officer(s) under a vulnerable situation is important and required to use less-than lethal weapons has been a continuous endeavor for not only the law enforcement management but the manufacturers for years. This "problem" has yet to be resolved.

## A New Generation of OC filled Round – The P.Round™ Tactical Projectile

A good friend of mine, who was a police officer in the Hong Kong Police, asked me whether I have the interest to see a new product developed by him. Without a second thought, I take a long trip to his factory in China where I conducted a thoroughly test on this “new product” hand in hand.



The product showing is named P.Round™ Tactical Projectile which contains OC powder. The new ball ammo was developed by APS Paintball Ltd. Originally for the Real Action Marker system. The specifications are as follows:-

Caliber	Type of ball	Weight
0.68 inch (17.3mm)	OC Ball	Cal. .68 = 3.5g
0.40 inch (10.9mm)	code: O-68, O-43	Cal. .40 = 1g

According to the founder, P.Round™ is effective not only for crowd control but in many law enforcement scenarios which less-than lethal option is warranted. The characteristics of the P.Round™ are :-

- (a) Fired P.Round™ is accurate on individual target at distances of 30 meters and can be used for area saturation at distance of 60 meters.
- (b) P.Round™ has fast effect on human bodies without adverse side effects. To this end, it can be deployed in numerous situations for law enforcement.
- (c) P.Round™ only irritates human eyes, upper respiratory tract or skin. The affected person can be recovered within 45 to 120 minutes depending on how serious he/she was being affected.
- (d) P.Round™ is not flammable and therefore it is safe.
- (e) P.Round™ uses natural chili ingredients that have low environmental implications.
- (f) P.Round™ does not corrode metals.
- (g) P.Round™ (Small Chili Powder) contains 2% Chili Ingredients, Silica Gel, sulfuric acid barium and dispersant.
- (h) P.Round™ training round price is under US\$0.15 which makes the realistic training more cost effective

## The Field Test

Simple by looking at the P.Round™, it is just like traditional paintball but it achieves its revolutionary characteristics from its design.

In order to increase the performance of the P.Round™, they make the ball 100% perfect roundness in shape without any deformity providing accuracy, straightness of shot and long range when fired. Most important is that the surface of the ball is like a golf ball having over 150 dimples. Golf ball surface can increase the performance of the round. Its flies straighter and even further than standard paintballs. This is the first time I have even seem such a design in tactical projectiles.



The frangible shell is almost ceramic in consistency, hard enough to completely hold a tightly packed amount of OC powder but still breaks consistently upon impact. Its also gives the projectile incredible resistance to moisture and humidity. Experience proved that a P.Round™ soaked in a glass of water overnight will retain its original shape, size and rigidity. There are no storage problems due to extreme temperature conditions such as in rainy or extremely cold weather..

The P.Round™ is designed to be fired by a purpose made replica shotgun which was made of excellent quality and feel. Plastic projectile often break in barrel after rounds were fired as the barrel will be obstructed by the frangible shell of the projectile. The P.Round™ maintains no change in quality or barrel breakage having more than 50 rounds were fired even under extreme conditions e.g. exposed under the sun or even in high humidity.



The replica shotgun is user friendly. It is easy to operate with only a 10 minutes familiarization. I was surprised that the P P.Round™ is so accurate on individual targets at a distance of more than 30 meters when it was fired by a reasonable trained

officer. Because of the powder's feature, you will be able to see a white mist when the round impacted on target. With the 2% level w/w capsaicin II, it has fast effect in saturating an enclosed area such as a 100 sq. foot room.

With my experience on firearms training, a four-hour block will be sufficient to complete the initial training on this less-than lethal weapon followed by continuous training once every year. It should not be a burden to the already packed training programme for most of the law enforcement officers..

### **The Production**

I was also arranged to tour around the factory viewing the production of the P.Round™ in progress. The production of the P.Round™ involves numerous procedures which maintain the quality of the round. Every procedure is carefully monitored by experienced supervisor. In order to maintain the quality control over the product, the workers are well paid when compared with average wages in that area of China.

### **Safety Issues**

I think safety is a prime concern for all law enforcement agencies as their primary duty is to protect the lives and properties of our citizens. According to the test report of the P.Round™, it is safe to be used and it is safe to our environment...

The P.Round™ is non-flammable and there are no unusual fire and explosion hazards. For environmental impact, the test results also comply with the RoHS Directive 2002/95/EC and 2005/618/ECF.

It also complies with the Clean Air Act Amendments of 1990 (CAA 40 CFR) which cited that "No components are listed as hazardous air pollutants. The product is not made with nor does it contain any Class 1 or Class 2 ozone depleting substances as defined under the amendment to the act."

## **Conclusion**

The less-than lethal option plays a very important role in an officer's street survival. However, the traditional less-than lethal weapons have limited to the close quarter combat situation.

A new generation of OC filled round – **The P.Round™ Tactical Projectile** has achieved its revolutionary characteristics from its design. They make the ball like a golf ball having over 150 dimples providing accuracy, straightness of shot and long range when fired. The frangible shell is almost ceramic in consistency, hard enough to completely hold a tightly packed amount of OC powder but still breaks consistently upon impact. Its also gives the projectile incredible resistance to moisture and humidity.

The P.Round™ is effective for not only for crowd control but in many law enforcement scenarios which less-than lethal option is warranted. It is designed to be fired by a purpose made replica shotgun which was user friendly. The P.Round™ maintains no change in quality or barrel breakage. It is accurate on individual targets at a distance of more than 30 meters. With the 2% level w/w capsaicin II, it has fast effect in saturating an enclosed area.

An four-hour block will be sufficient to complete the initial training on this less-than lethal weapon followed by continuous training once every year.

The production of the P.Round™ involves numerous procedures which maintain the quality of the round. Every procedure is carefully monitored by experienced supervisor. Based on the test report of the P.Round™, it is safe to be used and it is safe to our environment...

## **Author**

Albert Y C LEE was a Superintendent of the Hong Kong Police Force (HKPF). A 30 years veteran, he was the officer-incharge of the Weapons Training Division of the HKPF providing firearms and tactics training for 28,000 police officers in Hong Kong. During his tour in the HKPF, he was responsible to lead a mobile training team to provide tactics training for Public Security Bureau tactics instructors in China, more than 1,200 tactics instructors were trained in various Provinces in China. He is also an expert witness in court of law. He is the life member of the International Association of Law Enforcement Firearms Instructor, USA (IALEFI) and a committee member if the International Training Committee. He was retired in August 2009 as consultant for the following organizations:-

- Special Professor, Chinese People's Public Security University
- Professor, Police Training, Zhejiang Police College
- Guest Professor, Police Training, Fujian Police College
- Fujian Public Security Bureau, Police Tactics Training Expert
- Consultant, Macau Science and Technology University
- Honorary Advisor, Police College, Hong Kong Police Force