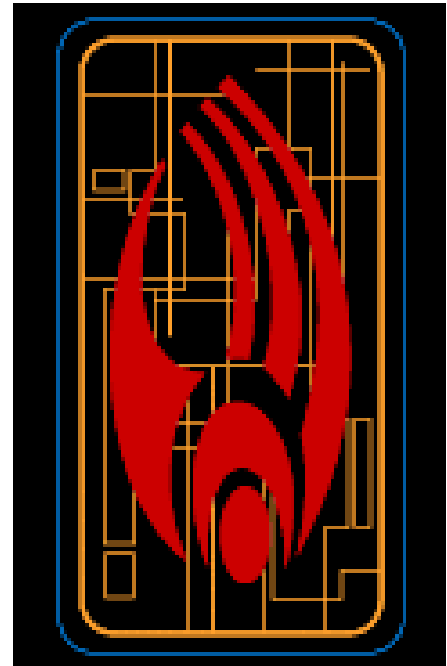


**How do you kill a Borg Drone?**

**With ROCKS!!! BIG FREAKING ROCKS!!!**

**XB-30 Thesis:  
The Use of Hyper-Kinetic Projectile Weapons  
versus Borg Drones.**



**By  
General Scott A. Akers, SFMC  
Commandant, Starfleet Academy**

**WE ARE THE BORG  
LOWER YOUR SHIELDS AND SURRENDER YOUR SHIPS  
WE WILL ADD YOUR BIOLOGICAL AND TECHNOLOGICAL  
DISTINCTIVENESS TO OUR OWN  
YOUR CULTURE WILL ADAPT TO SERVE US  
RESISTANCE IS FUTILE**

And so it begins, the introduction in 2365 of the Federation's greatest threat to date, the Borg Collective. The inner most fears of most races of the Alpha Quadrant is such a regime as the Hive Mind collective. Twice the Federation has faced a major incursion by the Borg, and both times came perilously close to succumbing. New technology, new tactics, and new vessels, stand ready to counter any further attacks, however, the Borg are not standing still, and their apparent focus on the Federation is a major concern.

The biggest threat the Borg present, is their rapid ability to adapt to Federation technology and weapons. While *USS Voyager's* return to the Alpha Quadrant, brought new shipboard weapons to counter Borg Cubes and other Borg Vessels, how does one combat the individual Borg Drone and its ability to adapt to phaser weaponry at incredible speed?

As was discovered by Captain Picard of the Enterprise-E during the "First Contact" incident, the Drones are particularly susceptible to the effects of projectile or bladed weapons. Therefore the SFMC Weapons Development task force has been assigned to develop a projectile weapon that will not only defeat Borg Drones, but also defeat their adaptive shielding if they are capable of modulating same to overcome projectile rounds. The weapon developed: the P888C Hyper-Kinetic Projectile Carbine, will be elaborated below, and will be shown to be THE determinate SFMC weapon for combating Borg Drones in any Collective invasions of the future.

In this paper we will look at the threat posed by the Borg Drone: it's Physical Capability, Adaptive Shielding and Body Armor. We will then look at the P-888C: it's Capability, the training needed and the proposed Deployment and Tactics for the weapon. Finally then the Results of the weapons use: on the test range, in the field, and aboard ship.

## **PART ONE: THE BORG DRONE**

The drone is the term for an individual cybernetic automaton of the Borg Collective, analogous to the male workers in a beehive. Drones are the result of the assimilation of individuals from other species, and are put to work performing tasks as directed by the "hive mind." Drones are generally always humanoid in form; Starfleet personnel have no knowledge of any non-humanoid species being successfully assimilated (Species 8472 being an example). Drones are equipped to adapt almost immediately to virtually any offensive maneuver; for example, phaser fire is usually effective only once — when one drone is downed, others also under threat will determine the frequency of that phaser fire and raise personal shields to counter it. Drones can also survive in the vacuum of space without special equipment.

All Borg are fitted with a neurotransceiver in the upper spinal column, which links every drone to the Collective. From this moment on, the drone is connected to a complex subspace communication network and can "hear" the voices of all other members of the Collective. A new drone is also implanted with a neuroprocessor just below the ribcage, which contains a memory

chip that stores all the information and instructions received from the Collective. Other modifications made at the cellular level include the installation of biosynthetic glands and microcircuit fibers, which infiltrate the body, and a microtubule network embedded in the esophageal tract. The DNA is at least partially rewritten, and there are structural changes in the brain's motor pathways. Standard surgical modifications include the replacement of one forearm and one eye (usually the left). In some instances the organic elements are left intact underneath the technology, but in other cases they are entirely removed. Borg eyepieces use a holographic imaging system to process visual information, giving the drone extremely advanced visual acuity. The prosthetic arm serves a variety of functions, often containing a cutting tool and computer access and power interface units. In certain cases a drone will be assigned a particular function, such as Medical Repair, in which case they will be fitted with a specialized servo-armature. Once fully absorbed, the drone is supported by the technology — it no longer needs to eat, although it requires regular infusions of power; and it can function in environments normally harmful to organic life forms, such as the vacuum of space. And the victim loses all sense of individuality.

Because of these modifications on the cellular level, individual drones are much stronger not only than non-assimilated members of the same species, but even stronger than most bi-peds of the alpha quadrant. In relative strength, a Drone of a human is equal in strength to Gorn or Hirogen warriors. In addition, the ability to ignore pain, and the absence of emotion, allows the individual Borg Drone, to perform at peak levels, even when doing same causes damage to the biological components of the drone's body.

These same implants and adaptations, allow the Borg drone much greater endurance, being able to continue on, even during high intensity combat situations for over twenty hours at a time, and only requiring a few hours (2-4) of regeneration, to sustain the biological portions of the drone. Fear, Exhaustion, Worry, Thirst and Hunger do not apply to the Drone, making them the virtual counterparts to the Jem'Hadar warriors.

Contrary though, while having massive endurance and not apparently ever stopping until killed/deactivated, they are incredibly slow. It is unknown why, but it is assumed that a combination of the body armor and the implants causes the drone to walk zombie-like trodding ever onward. In addition the body armor and shielding has given the drones very little reason to adapt to be faster. However, we cannot assume that this speed situation will remain static, and the Borg are quite capable of both adapting and/or assimilating a quicker species.

The drone's greatest strength is the adaptive shielding. This personal shielding device is controlled by the Collective and not locally at the drone. This then gives the Collective the ability to learn from the death/destruction of one drone and enable them to adapt and adjust the personal shields of other drones, so as to negate the damaging effects of EM (Electro-Magnetic Energy) weapons. Even modulating the weapons frequency can only work so long, before the Collective's massive computing power, can predict the frequency shifts and again protect the drone against any Beam Weapons. Phasers, Disruptors, Lasers, etc have only a short term affect on the drones, which again negates the negative of their slow speed (and vulnerability as targets).

The weakness in this EM modulation is evident when facing Projectile weapons whose power approaches that of Kinetic Energy weapons. Borg Drone shields powered at the individual level have ability to negate beam weapons, but the power requirements to act as a deflection

device are unavailable to the Borg at this time. This then gives the Federation forces the opening needed to create and modify weapons to use against the drones. High velocity projectiles have the ability to penetrate the drone shielding and impact their body armor.

In addition personal edged weapons, like Klingon Makleths & Batleths, Vulcan Lurpas, and even Human swords have the ability to ignore the EM shielding and inflict damage on the drone physically but have the drawback of bringing the wielder in close proximity to the drone and their microtubule network and nano-probes. This then makes the federation trooper prone to be a victim of assimilation, which defeats the entire purpose of combating the drone in the first place.

In addition to the adaptive EM Shielding, the Borg Drone possessed regenerative body armor, that protects the drone from physical attacks and is the most likely defense against both bladed weapon attack, and projectiles weapon attacks. The Armor is also known as Exo-plating or incorrectly as the exoskeleton. The form-fitting armor is anchored to the body with a network of micro-connectors. The skull plating alone is attached with over 3 million micro-connectors. This plethora of connectors, aids in the regeneration of the armor, and minor exterior damage is quickly negated. Thus physical attacks must not only overcome the armor, but also inflict immediate damage, or the armor will just regenerate and then must be overcome again.

The Exo-plating while less than 3mm in thickness provides protection equivalent to SFMC Vehicle MD Armor. This in effect gives the plating the same protection as provided by 3 cm of a duranium base, 2 cm of spaced ceramic composites, 2 cm nitrium alloy bonded to 1 cm terminium with a Kelbonite topcoat. The Duranium acts as a super dense penetrator barrier, the ceramics as a heat and plasma dissipater, the nitrium as an energy refractor, and the terminium as shock absorbing element. In addition the Kelbonite has the additional advantage of scattering scanner beams and laser and maser beams effectively.

This then is the Borg Drone, relentless, soulless, and deadly. Phasers are ineffective, Disruptor equally so. Bladed weapons are effective, but again put the wielder too close to the drones to be effectively safe in any realistic combat or boarding situations. Thus the P888C had to be developed for the safety of the troops and the federation at large.



**Nano-probes**

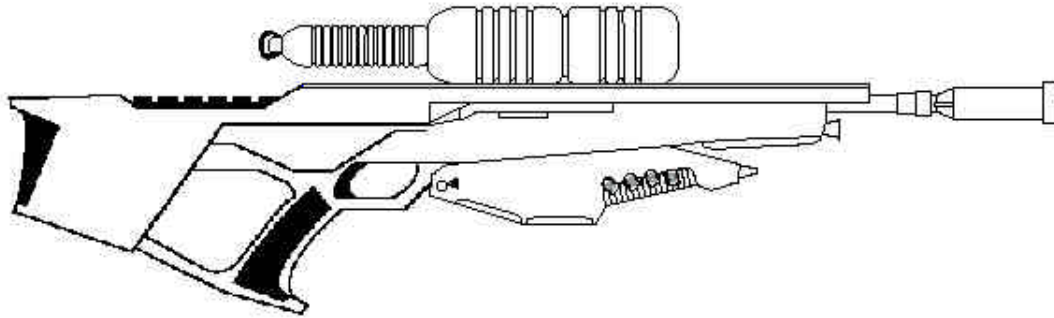
## PART TWO: THE WEAPON

The P-888C: Hyper-Kinetic Projectile Carbine, is primarily based on the P-688 Sniper Rifle of the SFMC Infantry. The P888 is like the P688 an electro-magnetically fired projectile weapon capable of hitting targets accurately at an effective range of 1.5 km. The P-888 has an integral air data probe which can evaluate the atmosphere for wind and pressure, analyzing this data, the P-888 can also be set to self-adjust its muzzle velocity to just under the speed of sound in any given atmosphere, making the weapon silent. The P-688 is capable of emptying its 30-round magazine in 15 seconds. The P-888 fires special "smart" 7.5mm caliber projectiles of five types: ITR (inert training round), JHP (jacketed hollow point antipersonnel round), explosive antipersonnel round, incendiary round, and light armor piercing round. Each wielder of the carbine typically carries at least one magazine each of the latter three, and two of the JHP rounds. The weapon is a specially cut down design of the 'rifle' version of the P688, making its use aboard ship more practical. In addition, the standard safety features of the 688, including a retina scanner inside the scope, which is programmed, for only the user are included. It also scans for blood flow so that a dead eyeball cannot activate it, this also affects a shooter who has been assimilated, and the weapon is now inert for his use. Adjustment by any non-authorized source will cause the weapon's power source to melt down, and self-destruct.

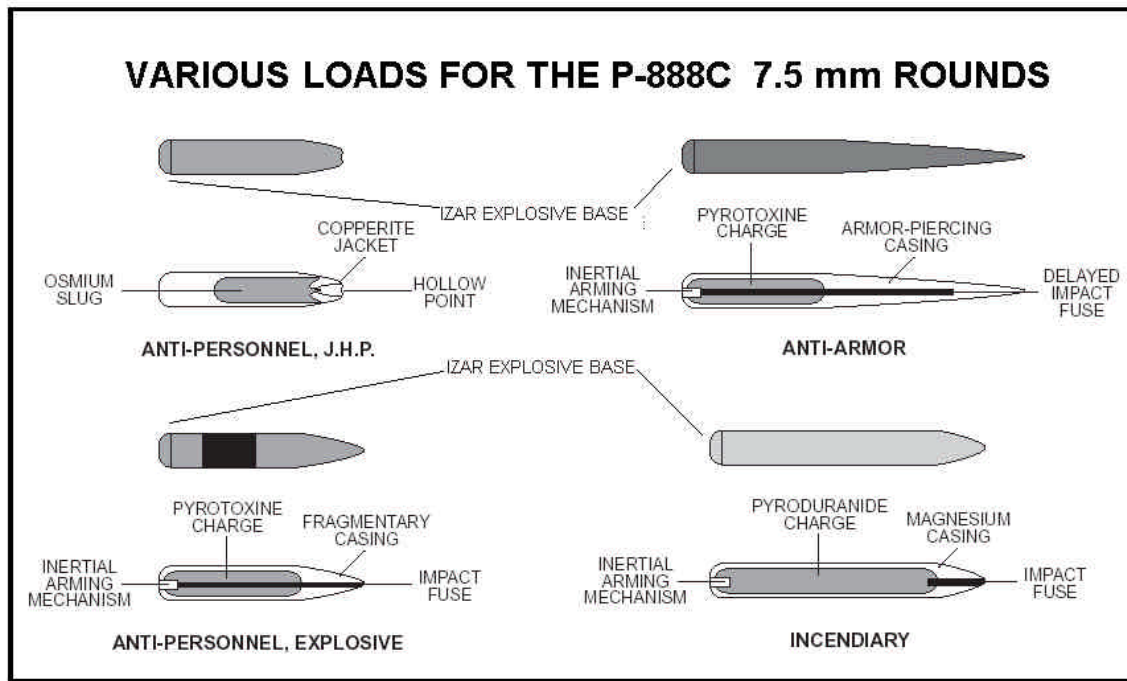
The stopping power of the P888 is a value of three factors: Organic Dynamics of the Round itself, Velocity of the Round imparted by the weapon, Mass of the Round on impact. The Mass of the Round is a constant factor, all five types of P888 munitions use a spin balanced round that masses out at 10.4 grams. The velocity imparted by the P-888 as the round exits the barrel is 17,500 meters per second, and averaged over that 1.5 km of effective range is 10,000 meters per second. As the reader can see, the effective velocity of the P-888 is over 4.375 that of the P688. This equates to 520,000 Newtons of Force transferred to the target upon impact. With deductions for atmospheric friction and other energy parasitical elements, the round will still impact with 416 kN. Due to the small size of the round, this then transfers to the target 9.416 GIGA Joules of Pressure on the impact point of the round. Next factor in the round's warhead itself, and you have a weapon that will cause so much more damage that it equals the pressure caused by the round, and can under the right circumstances double same. Each of the rounds mentioned above, have the additional payload of a self-destruct device, and additional duranium (simple duranium slugs that impact at hypervelocity speeds, have enough kinetic energy to produce more destructive force than the equivalent weight of traditional explosives.). The self-destruct device, a microscopic amount of the same explosive created by Garth of Izar before his being cured of his unfortunate condition, is measured out to have the exactly equal effect of the Hyper Kinetic Round. The Round then is set to detonate 1 microsecond (1 millionth of a second) after impact with either the Borg itself, or the drone's shields if they are set to deflect KE weaponry.

This timing allows penetration of the drone of about 5 cm, before detonation, or if rebounding from the shields a distance of ten cm. If the round has penetrated the drone, the explosion doubles the damage already done by impact, and in effect not only destroys the drone from the inside, but also has been shown to actually crush the nano-probes therein, into molecular sized junk. If the round is rebounded, the placement of the explosive in the base of the round, will when detonated act both as a self destruct device, and a momentum stopper, flaring back towards the drone in a jet of plasma and photon packets that under test conditions overwhelm a KE shield, and attack the drone, if the drone can cycle back to a standard EM shield, then this attack too can be blocked, but so far, drone shielding cyclings have shown to take at the least 1/10 of a millisecond, or 100 times longer than the weapon's detonation.

In addition with the larger magazine on the P888, the rate of fire is only slowed by the operators ability to track and fire. The weapon is intentionally designed to not be able to fire more than one round every .75 seconds, allowing the onboard computer time to acquire a separate target for each round. In addition the computer will not allow the weapon to fire if none of the predetermine threat forces are in its targeting range and arc. In effect, if there are enough drones advancing on the operator the magazine could be emptied in 22.5 seconds.



**THE P-888C**



Shown above are the four most common munitions types for the SFMC's arsenal of EM projectile Infantry weapons. Not shown is the inert training round. The rounds shown here are the 7.5 mm P-888C rounds, although 5mm and 15mm rounds appear very similar and use the same basic internal arrangements sans the IZAR explosive base. EM projectile weapons with muzzle velocities higher than 4000m/s (as on Mecha, aerospace craft, etc.) use simple duranium slugs because, at those speeds, their kinetic energy produces more destructive force than the equivalent weight of explosives. This includes the 10,000 m/s velocities of the P-888C.

## **Training and Deployment:**

Training for the P888 is as important as the capabilities of the weapon itself. The weapon can obviously fill many roles in the SFMC inventory, and thus each of these has to be accounted for separately during training. Like its parent weapon, the P888 is a sniper weapon, albeit one that is no longer silent in regards to sonic speeds. It can also be used in Squad level units as the projectile weapon, or part of the Weapons Squads in Marine maneuver platoons. Finally it can be used as a shipboard weapon by MSG detachments, in anticipation of Borg attacks, or attacks by other threat forces using powerful EM Shielding.

When used as a sniper weapon, the P888 is wielded by a trained sniper, accompanied by a spotter equipped with a P688 over and under Projectile Weapon with Phaser Capability. The job of the spotter is to find the target, AND to protect the sniper. The Sniper and Spotter are BOTH qualified snipers with the 308 MOS. Special training in reconnoitering, stalking, marksmanship and concealment make 308s valuable commodities on the battlefield. Usually operating independently of larger infantry units, 308s travel in two-person teams who then alternate roles as sniper and spotter. Expert in using the P888 to its full 1.5 kilometer effective range, and often farther, the sniper is obviously designed for tactical use planet side. Sniper training is not necessarily a plus aboard ship, but their skill is often transferred to shipboard shooting.

In the field, the P888 can be an effective addition to heavy fire team of a Maneuver Squad or the most useful when used in the Weapon's Squad of the Maneuver Platoon. Holding over-watch over the other squads, the Weapon's Squad lays down an effective field of fire to suppress enemy maneuver and protect their platoon mates. The P888 when used correctly by a trained operator, can effectively reach out farther and further and be an effective counter sniper weapon, as well as keeping enemy commanders behind physical armor, instead of relying on EM shielding. And as shown above even KE Body Armor is susceptible to the P888's rounds.

Against Borg Drones in planet side operations, the P888 will be distributed one or two to a fire-team and replace the Auto-weapon and Rifleman's standard Phaser Rifle. With this situation, all marines will need to be familiarized with the P888 during Basic Infantry School, as well as continuing education with the piece during the service life of the P888. Training the marines to use the P888 in conjunction with variable standard Beam Weapons as well as Ballistic Profile grenades, will give the small marine units a higher survivability rating while in combat with Borg drones.

Finally the Marine Strike Group Detachment, also known as the MSG Detachment, Mardet, or simply the MSG, needs training on this the last stand weapon against the Borg Drones. In such a confined situation as boarding from a Borg ship, every member of the MSG is issued a P888, with Armor Piercing rounds in all seven magazines, and usually an additional satchel of seven magazines worn across the back. The MSG troopers are trained to work in leapfrog manner firing only at the Drones when a lock has been made. Overrides can be used to allow the weapon to fire without lock, or if lock is lost, allowing the explosive effect of the weapon to knockdown or cripple the drones, but the marines are taught to only use this override, if the ship is overrun, and the self destruct fail safes have been initiated. At this point the MSG's sole duty is to keep the drones away long enough for the ship to self-destruct taking the ship, the drones, and hopefully the Borg Ship with it, stopping the threat, and preventing the crew from suffering a fate worse than death.

## **PART THREE: RESULTS**

Before the P-888C or any other weapon is put into service, it has to go through a standard but essential review process to make sure the weapon works as promised, that is more devastating when used on the enemy, than its side affects upon friendly units. For Marine Weapons, they are tested in three different environments. These are the enclosed Test Ranges at New Masada, in the field on New Masada and select planets throughout the Federation, and then on board mothballed ships at Utopia Planetia.

On New Masada, the Hathcock Test Range has three major facilities. Labs, that constantly test and retest Federation, Allied and Threat Forces small arms. Holodeck ranges that test dry fire simulations of all the weapons systems. Finally Live Fire Ranges, with a variety of targets, static and automated to give the testers and shooters the ability to first hand see the results of the shot, without taking for granted computer simulations and the assumptions made by the programmers.

The Holodeck testing showed conclusively that the projectile would penetrate any EM shielding a drone may have, and would quiet effectively destroy both the drone AND the nano-probes therein. In addition the Exo-plating conveniently contained the self-destruct explosion, with minimal blast damage exceeding 10 centimeters from the Target. Negatives shown included the fact that the drone was UTTERLY destroyed and thus unable to be saved by surgical techniques, and that a drone holding a hostage not yet assimilated will 93% of the time kill the hostage from the effects of secondary blasts.

Against KE Shields, the results were not nearly as positive. While the concussive effects of the round impacting on a KE Shield, destroyed the drone over 99% of the time, the ricochet of the round had deleterious affect seven percent of the time. While the round detonated every time at the pre-arranged setting, in those seven percent of rounds fired, tumbling occurred on ricochet from the KE Shield. The Plasma Blast from the round then impacted the shield only 84% of the time, leaving 13 rounds of out one thousand fired, that the above Plasma Blast affected the Holodeck 'ship', 'crew' on in two instances the shooter themselves.

On the live range, two major test categories were performed. First using animated robotic targets that were hardened to simulate Borg Drones with their Exo-plating body armor. In addition, the drone's speed was increased by 50% over recorded to take into account the Collective adapting to projectile weapon tactics. During these tests, the Drones did not have any KE shielding (simulating only drones EM shielded); the rounds detonation sequence was reset to explode one microsecond after the round was supposed to hit the target (as determined by the onboard targeting computer). In all test groups, the results were stunning, out of one thousand rounds fired by each of three test groups, ALL rounds impacted the targets, and all targets were eliminated.

In the final test the Drone targets were equipped with functional KE shielding and even here the tests were actually better than the Holodeck testing in two of the three control groups, and slightly worse than the Holodeck on the last control group. Test Group A was made up of Master Sniper and Sniper Instructors, out of 1,000 rounds fired only two ricochet in such a way that the plasma burst was off target missing the shield entirely. Test Group B was made up of recent Sniper School Graduates with four misses. Test Group C was made up of standard Rifle School Graduates who had 17 misses out of 1,000, with no injuries to the shooters, exceeding



the safety margin of the Holodeck testing. A lesson learned early by all of the shooters was to keep at least three to five meters between themselves and the targets.

Taking the weapon into the field again with automated robotic targets simulating the Borg Drones was necessary for the next phases of the testing. Because of the classification of this weapon system, and the lethality of its ammunition, tests were only done at New Masada itself, and specific non-inhabited planets whose name, location, and even existence is highly classified. The weapon was tested in several different environmental conditions including, clear atmosphere, jungle/humid atmospheres, temperate forests, snow blind, dust blind, and vacuum conditions. Marine snipers, and riflemen again tested the weapons efficacy against the Drone simulacrums in both sniper-scout hunting teams, and within traditional maneuver elements. Surprisingly the more difficult environments did not seem to impact the efficacy of the weapons fire. However, vegetation did decrease the round on target success, as tree trunks and the like did set off the self-destruct trigger of the round. However, unless facing KE shielded drones, the shrapnel from hitting vegetation and other environmental interferences often immobilized the drone such that a second shot took down the target.

On New Masada an Urban Combat Scenario was played out, with simulacrums portraying drones, civilians, and civilians turned drones, the weapon had its most difficult test to date. Three scenarios were played out, and tactics were quickly developed by the sniper and fire teams that were issued the weapon. Scenario One portrayed the town being attacked by the Borg. In this scenario all three Test Groups quickly dispatched the attackers with only three assimilations of the civilian population. Scenario two dealt with the town being fully engaged with random percentages (35-65%) of the population already assimilated. Here the weapon was used in a more unique and unexpected manor. Due to the targeting computer's advanced scanner, it was able to distinguish between 'assimilated' and 'unassimilated' simulacrums. The marines testing the weapon, used the rounds explosive effect to selectively destroy, disintegrate, and even crumble walls and buildings to create barriers between the slower moving drones and the faster fleeing civilians. In addition the shooters utilized the shrapnel effect to take down the 'recently' assimilated without destroying them, allowing Marine medics to rescue and halt the assimilation when possible. In these tests of the 1000 rounds fired, two 'civilians' were killed, seventeen wounded by the weapon, and on average 14.7% were assimilated before the Borg were defeated. Scenario three, dealt with the entire town being overrun, and ten civilians needing to be rescued. Of the twenty different tests run, 73% of the civilians were rescued, 3% were killed by incidental fire, and 12% wounded. In this scenario, the marines suffered three losses, two deaths and one 'assimilation', the 'assimilated' marine's own weapon then 'self-destructed' removing him from the scenario.

Lesson learned from the urban testing, is that if the Borg land on a populated planet, that regardless of the weaponry chosen, loss of life will be massive, if not catastrophic, the Federations best tactic is to defeat the Borg in space, before they reach planet fall.

Finally the P-888C was tested extensively onboard the mothballed ships at the bone yards of Planetia Utopia. Amid very tight security, the weapon was used in live fire tests with the Marine shooters being equipped with KE shielding on their Power Armor suits. The tests were conducted in three different scenarios, first with a Pressurized Hull, second with a Depressurized Hull, and finally the Last Stand scenario where the CO is trying to self-destruct the ship before it is completely assimilated.

During Pressurized Hull tests, the MSG teams equipped with the P-888C were able to defeat the Borg boarding parties, twenty times out of twenty. The Ships were NOT surrounded by force fields, so that the shooters will behave in a manner more implicitly true to a real life situation. Taking that into account, twice, the ship was holed, but standard emergency force fields slammed into place almost immediately. There were no marine casualties, and in the ten scenarios where 'crew' members were simulated, there were twenty-seven 'assimilations' and five friendly-fire casualties.

The following tests were that of a ship which had already been depressurized, and the marines were in ATAC armor. Here the test assumed that between 5 and 15 percent of the crew had been assimilated and that the drones were trying to disable computer access by the Captain. Here the results were even more one sided for the Marines. While not having to worry about the stability of the ship's hull, the Marines went all out in hunting the Borg down. In a reverse of every prior encounter with Collective, the Marines with the P-888C turned the tables and hunted down the drones. While not able to retreat, the drones were often made to hesitate and even be confused, the standoff ability of the KE rounds, as well as the one shot – one kill ability just decimated the drones. The hostile 'assimilations' dropped to eight over the 20 scenarios and friendly fire casualties also dropped to four.

The last test was the "Last Stand" Scenarios. In this, the Captain has decided to self-destruct the ship and sacrifice the entire crew, rather than to let them all be assimilated, and the ship become part of the growing Borg Collective arsenal. In these tests, the MSG was assigned to protect the computer core and the commanding officer for periods of elapsed time lasting from five minutes to an hour. In these scenarios the Marines were faced with ever increasingly large Borg boarding parties. The last of which, the hostile force was comprised of one thousand drones and recently assimilated crewmembers, operating at FOUR times the known Borg speed. In all of the scenarios the Marines lasted long enough for the detonation. One lesson learned was for the Marines to work in teams, as it was discovered that the recently assimilated were vulnerable to phaser attacks for at least ten minutes, this then kept the use of the precious drone killing ammo from being used on the more easily 'killed' targets. In addition, every time a marine with the weapon was assimilated, his former teammates would take him out before he could inadvertently have his weapon self-destruct, thus again the precious ammo was preserved. The casualty rate among the marines was horrendous, ranging from fifteen to eighty-seven percent, but in the end with the ship self-destructing the casualties were one hundred percent anyways.

## **CONCLUSION**

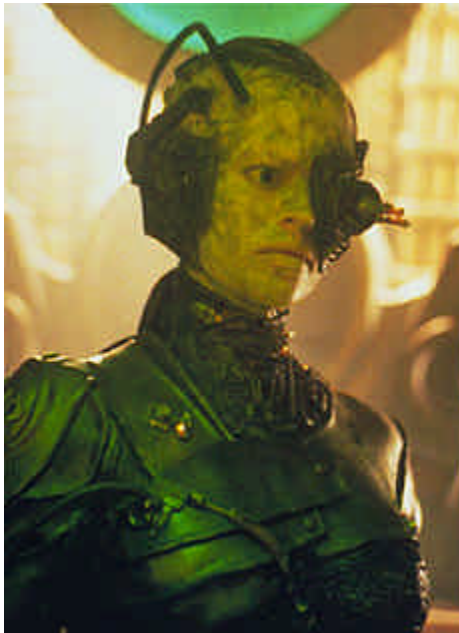
To review what we have done, we have looked at the Borg Drones themselves. These are the targets, the threat, the menace we must combat. The great sadness in dealing with the Collective is that many of the drones were once our friends, our comrades, and our peers. But once assimilated, the possibility of recovery is nearly impossible under combat situations. The ability does not yet exist to 'rescue' drones on demand, and to initiate surgical recovery. So, we then discussed the proposed weapon system, the P-888C Kinetic Energy Projectile Carbine. We showed how it works, how effectively it works, and how it should be deployed and the training needed for same. Finally we tested that weapon, and tested it, and tested it. Because of its horrendous power, the Federation did not want to issue such a device without full knowledge of its capabilities. These were elaborated above.

To restate the stated thesis from above:

Therefore the SFMC Weapons Development task force has been assigned to develop a projectile weapon that will not only defeat Borg Drones, but also defeat their adaptive shielding if they are capable of modulating same to overcome projectile rounds. The weapon developed: the P-888C Hyper-Kinetic Projectile Carbine, will be elaborated below, and will be shown to be THE determinate SFMC weapon for combating Borg Drones in any Collective invasions of the future.

We have conclusively shown that the P-888C is indeed the correct direction to go in combating the Borg Drones. In addition we have discovered that if we want to reverse the Borg advances and 'un-assimilate' the drones, we will need to develop non-lethal weapons that can counter the shielding, the nano-probes, and any other adaptive technology the collective equips the drones with. Obvious tactics of knock out darts and such, will not immediately succeed in light of the Exo-plating, however the rescue of Annika Hansen sheds some light on what further research needs to be done. And will be done.

**"Chance is irrelevant. We will succeed." (Voyager: "Night")**



## Appendix One: Outline

### ROCKS BIG FREAKING ROCKS

#### Intro

Opening Quote

Thesis

Preview

- I. The Borg Drone
  - A. Physical Capability
    1. Strength
    2. Endurance
    3. Speed
  - B. Adaptive Shielding
    1. Against Beam Weapons
    2. Against Projectile Weapons
    3. Against Bladed Weapons
  - C. Body Armor
    1. Protective Ability
    2. Regeneration
- II. The Weapon
  - A. Weapon Capability
    1. Stopping power
    2. Penetration
    3. Rate of Fire
  - B. Training
    1. Sniper
    2. Small Unit
    3. MSG Detachments
  - C. Deployment and Tactics
    1. Aboard Ship
    2. Planet Side
    3. Integration into the Units
- III. Results
  - A. Test Range
    1. Holodeck testing
    2. Versus animated Robotic targets
    3. Versus shielded targets
  - B. In the Field
    1. Urban Situations
    2. Wilderness Situations
    3. Vacuum Situations
  - C. Aboard Ship
    1. Hull Pressurized
    2. Hull Depressurized
    3. Last Stand

#### Conclusion

Review

Thesis

Closing Quote