

# AIRSOFT XTREME

PHILIPPINES' PREMIER  
AIRSOFT MAGAZINE  
Maiden Issue



P120

## The Battles

**AGL Warriors  
overruns  
the Army**

**What you  
should know  
as a newbie**

**Authentic  
Gears and  
X-Treme Gunz!**

## DIY and Tech Corner

- Your guide for modification
- Featuring reviews and upgrades

**On Target:  
AIRSOFT  
LEGALIZATION**



# ON THIS ISSUE

## On Target: Airsoft Legalization

*Is it now legal  
to show-off  
your AEGs?* **50**

**What you should you  
know as a newbie **38****

*Learn the basics. From the  
gears to the rules of the games*

**History  
of Airsoft  
in the Philippines **28****

**Camp  
Madawig  
Unveiled **64****

## THE BATTLES

**AGL  
Warriors  
Overruns  
the Army **18****

**Scorching  
War:  
North  
vs. South **12****

**UP CLOSE  
AND PERSONAL  
Exclusive Interview  
with Almighty **24****

**ON CROSSFIRE:  
My First Encounter  
By Barbette Atienza **46****



## TECH CORNER (Review)

Double Eagle M50-A **66**  
by Roland Castro

Star Airsoft UMP **68**  
by Night Stalker

STEYR AUG **70**  
by Night Stalker



## LET'S TALK

Zombies are for real **16**

Principles of Ballistics **32**

Gear Up: *How to dress up for the battle* **42**

Hand Signals **22**

## DIY (Do it Yourself) Upgrades and Modifications

P90 **74**



Metal Based Cylinder Head **73**

Spring Guide **76**

Anpeq Case  
for Sub-C Battery **77**

Shimming Guide **78**

Battery Case **80**

## AX Zone Shots

Collection of best action shots **82**

## X-Treme Gunz

Featuring High End Replica Guns **62**

## Events

AGL 21<sup>st</sup> Anniversary **88**

Open FPS Night **90**

Store Directory **92**

## Price Watch

What's in the market? **82**

3Gs: Guns, Gears and Girls **54**





## Editor's Note

Just like the other magazines, it took us several months before we were able to launch Airsoft Xtreme Premier Magazine. Conceptualizing was a bit easy because the staff and the people behind are they themselves "week-end warriors".

But working on the details and the nitty gritty, figuring out what the readers wanted and expected from this material was the most difficult.

On this maiden issue, we decided to focus on the "newbies" or the green-horns I should say. We want this magazine to serve as their guide and manual to a better future in the field of "war gaming".

As for those individuals and teams who became the pillars of "airsofting" and have been in the field for over a decade now, our way of support is by featuring photos, as seen through the lens.


The reviews and modifications under "Do It Yourself" or DIY will surely give excitement and challenge that goes beyond just merely playing the game.

We also touched on the "legality" issue wherein it was best discussed here by people who were supportive of this endeavor and the personalities working their very best paving the way to achieve INDEPENDENCE.

But above all, there are things that need to be done, existing laws that needed to be amended or repealed. But with all the concerted efforts, we are surely on the right direction. ....just imagine, with all these things put in place, a day will come that there will be no more inhibitions, and our rights as airsoft enthusiasts will be protected.

We all know that legalization through legislation is a very long process. But just like our fellow airsofters, we from the AX Magazine had envisioned to have this activity legalized (In its truest meaning).

We thought we could help come to realized this goal by coming out with this magazine which promotes the replica guns' social acceptability.

  
**MELODY J. RIVERA**  
EDITOR-IN-CHIEF



Cover: **Clarisse Sioco**, Ramp model  
Make-up by: **Robin Jose**  
Photo Exclusive by: **Airsoft Xtreme Magazine**

## AIRSOFT XTREME MAGAZINE

**EDITORIAL**  
(Editor@airsoftxtreme.net)

**EDITOR-IN-CHIEF** MELODY J. RIVERA  
**TECHNICAL DIY EDITOR** RONDALD CASTRO  
**SENIOR TECHNICAL WRITER** ABS ABANDO  
**WRITERS** BARBETTE ATIENZA, RANDY CALUAG

**CONTRIBUTORS**  
RON DEL ROSARIO, NIGHT STALKER,  
RYAN A. SUBONG

**PHOTOGRAPHER**  
MEL MANALANG,  
CHRISTIAN UYBENGKEE

**DESIGN** (creative@airsoftxtreme.net)  
**ART DIRECTOR:** MEL MANALANG  
**GRAPHIC DESIGNER:** RANDY MALAYA  
**LAYOUT ARTIST:** GRACE DEOCARIS  
**WEB DESIGNER:** JAMES SAWYER  
**WEB EXECUTION:** CHRISTIAN UYBENGKEE  
**ADVERTISING & SALES** (ads@airsoftxtreme.net)

**SALES AND MARKETING**  
CHRISTIAN UYBENGKEE  
CHARITO DE SILVA

**BUSINESS**  
**Publisher** CHRISTIAN UYBENGKEE  
**Managing Director** ERWIN AMORANTO  
**Senior Financial Analyst** MICHAEL TAN  
**Director** DAVID DIZON

### ACKNOWLEDGEMENT

REX VILLAROSA, CONG. RUFFY BIAZON,  
PNP-FED DIR. ARTURO CACDAC, PNP-FED DEPUTY DIR.  
ROMERO ESTILLES, STEVE FONTANILLA Jr. MD,  
TONY ALONZO, RAFFY ARTIGAS, BERN MONCUPA,  
CHRIS TOLENTINO, NIGHT STALKER, FERDIE VALDEZ,  
JUN COSME, JOVY BERNABE, WENDEL RAMOS,  
BIGBOSS, BENZI, DON TAYAG, RYAN CHAO,  
JUNN JERONIMO, MARC EMPEYNADO,  
ALEX AMEDEO

**AIRSOFTXTREME MAGAZINE**  
published quarterly by:  
**Xtreme Data WorX, Incorporated**  
Rm 307 Cabrera II Bldg. 64 Timog Avenue, Quezon City  
TEL. NO.: 410-5545 FAX NO.: 410-5545

SEND COMMENTS AND SUGGESTION TO:

EMAIL: info@airsoftxtreme.net  
WEBSITE: www.airsoftxtreme.net

Airsoft Xtreme designs and layouts are copyright  
and registered trademarks of Xtreme Data WorX, Inc.  
Reproduction in whole or in part without  
written permission from the publisher is prohibited.

### DISCLAIMER

Xtreme Data WorX Incorporated as publisher is an  
advertising platform and does not endorse or make  
representation, warranty or guaranteed concerning  
safety or effectiveness of the products advertised in  
this magazine. The publisher expressly disclaims any  
and all liabilities relating to manufacture, sale or used  
of such products and services and the application  
illustrated in the magazine.



## LETTERS from the Front

Congratulations in advance to the staff of Airsoft Xtreme Magazine. Sana may blow-out?

--- Jay Davide, Caloocan City

Finally, a magazine made by airsofters for airsofters will soon come out.

--- Angelo Davucol  
Makati City

More power to the staff and people behind Airsoft Xtreme Magazine!

--- Christopher Baluyot  
Quezon City

### Airsoft Cutie Comments

Hi,

My name is Geraldine or Gee for short. I've been meaning to ask and share with you my thoughts regarding airsoft. Last night, me and my two classmates were arguing whether we should go to this game site where we were told had a lot of *maniakis*. I told them that not all airsoft players *naman* are *maniakis noh*. In fact, my ex boyfriend, who resides in the US is an avid paintball player. And he was a real gentleman to me. Except for being *palikero*, I don't think he was unfaithful or *maniakis naman*. But is it true? Please tell me it's not. Anyway, regards to the people behind airsoft xtreme magazine and congrats *pala* to your forthcoming maiden issue. Just me.

Gee

PS: I hope you can publish my studio shot together with my CQB gun.

(editor: Dear Gee, Yes it's true. Airsoft is a gentleman's game and we expect



that all players respect each other out of camaraderie especially women. *Sayang lang* you didn't mention the game site you and your friends were suppose to go to. It would be an interesting piece for an article entitled: Most avoided game sites. Regards from the AX team.)

Coming out with a magazine from conceptualization to production will definitely take time. I just hope you guys can pull it off. Good luck!

--- Gerry Reyes

(editor: Thanks for believing Gerry)

I hope your magazine will contain something for newbies like me. More power and good luck.

---Glenn Mendoza

#### Maiden Issue(s)

This magazine should have been out 2 months ago *pa*. But better late than never, ika nga. *Bakit ba ang tagal?*

--- Anonymous

We want to hear from you! E-mail us at [letters@airsoftxtreme.net](mailto:letters@airsoftxtreme.net) or fax us at 410.55.45 for more details.



# Scorching War: North vs. South

## Heat Stroke! Hit Strikes!

*(Editor's Note: The following story is an actual account of what has transpired last March 18, 2006. The day when the North versus South game was held at the Army Adventure Zone dubbed as the "scorching war". It was a very hot afternoon. Humidity almost knocked down the warriors, but no one or nothing distracted them from winning the battle. The event was documented by a fellow airsoft player belonging to the Techno Warriors).*

**March 18, 2006 Saturday**  
**0700 HOURS**

I woke up bright and early. Probably underwent rapid eye movement and dreams of glory interrupted only by remorseful visions of being hit without firing a single shot. Only to hear cries of Heat! Heat! Later on instead.

**0715 HOURS**

I sent text message to Santi aka Blackhawk about our scheduled "encounter". He immediately called me up saying "akala ko hindi ka na pupunta!?" He thought he was talking to this guy named thumper. But the confusion was short-lived after a quick verification. I suddenly thought, could this be a premonition of things to come? Naaah. Hope not.

**0745 HOURS**

We were on our way to the AAZ. I can't help but admire the way Blackhawk showed-off his enthusiasm and preparedness for the big event. The short trip towards the AAZ was a lesson on precision navigation. Blackhawk politely asked the taxi driver to pull over so he could get the map from the trunk somewhere amongst all the gears and stuff inside his sports bag.

Now, if we only knew from which end of the map can we find north and south.....might as well enjoy the view. Finally, after sighting a lone military guard manning his post, we knew we were there.

**0830 HOURS**

Tango papa and Trigger Happy of the who happened





to be the organizers of the event greeted us. I was the first to register. At that point, I reveled at the thought of a Wowowee prize awarded to the first five early birds as mentioned at their pregame briefing.

### 1000 HOURS

Fast forward to the first scenario briefing. All geared up in full digital marpat BDUs and armed to the teeth with weapons locked and loaded, I can't help but feel 10 feet tall. I mused at the thought of kicking ass. Lots and lots of 'em. Hoowah!

## The Actual Game Scenarios

### 1020 HOURS

#### THE GRAND SKIRMISH-ROYAL RUMBLE (GETTYSBURG)

-Both sides shall attack each other's camps, in waves, with specific objectives.

**Situation:** A Bus in the middle of the battlefield must be held at all cost. The tactical importance of this bus is of highest priority. Opposing forces will assault the bus to establish position and protect it at all cost.

**Mission:** Hold and secure the bus. Waves of reinforcements from both sides will arrive every 10 minutes.

Team TPC Techno Warriors looked formidable and intimidating in their BDUs. The fact is, I could have sworn seeing those pixilated mar pat BDUs gradually become unrecognizable as it blended with the shrubs and bushes right before my very eyes. Just bias I suppose.

### 1030 HOURS

The Northern Alliance composed of veteran team leaders converged and discussed their tactics. It was agreed that 3 Bravo teams of Techno Warriors with strength of approximately 25 battle eager kick-ass geeks will lead off the first wave of assault.

## The War Begins!

We did a final check on our gears as well as double checked our weapons and ammo. **GOGGLES DOWN!** Which means the game is on! The moment the timer started, all hell broke loose. There was no time to give orders. In fact, there was no need to give orders. An organized chaos ensued. Everybody headed for the nearest cover. But just as we were surveying our 12 o'clock for enemy movement, sporadic bursts of automatic gunfire coming from our left flank suddenly rained fresh bb's from behind the line of shrubs and bushes. The enemy hit us hard which downed at least one third of Bravo team instantly.

Before we knew it, game was over. Having walked through the confusing terrain, all 3 bravo teams regrouped



towards the neutral zone with an awful bitter taste of defeat in their mouths. With fortitude, we accepted defeat.

### 1100 HOURS

SNATCH THE WAR CRIMINAL (BOSNIA-HERZEGOVINA, 1999)

MISSION: Teams shall snatch the war criminal and bring him alive to a designated point.

This time, the Northern Alliance established position from where the Southern Forces gained advantage to defeat us. We had the chance to study the terrain and to think deeply of the tactics. Bravo One team leader Swordsman a.k.a. Crossbones, who stood as the Bravo One Team Leader came out as the hero in this scenario. The score was tied. Damn, I love this game! Hoowah!

### 1330 HOURS

THE COMBAT SEARCH AND RESCUE OF BAT 21 [NORTH VIETNAM, 1971] - Teams shall search for and rescue the downed pilot with the codename "BAT 21".

Although I wasn't able to "really" play in the last two scenarios, for obvious reasons, (Please take note of the title).

I had the privilege of getting some intel report from fellow weekend warriors. It was a stalemate. A siege if you will. The scenario ended with a deadlock. No decisive outcome from both sides.



### 1430 HOURS

LOCATE AND DISABLE THE NUKE [BANDA ACEH, INDONESIA, 2007] - Teams shall locate a weapon of mass destruction planted by Jemaah Islamiyah terrorists, bring it to the target safe area, and disarm it using a designated code.

This last scenario was the decisive game which made the northern alliance emerged as champions. While this scenario was taking place, my good CO was helping me take my gear off my overheated body. With this scenario, I heard that zombies began rising from their graves. Jeez, was it all in the spirit of fun? You decide!

As for me, I left the game site smiling all the way to my crib with images of a cold, cold shower.

## FROM THE INBOX:

*"I loved the games here at AAZ. I think I got to take down 4 enemies though I got hit in all the scenarios. The tough one is the heat of the SUN...geeze I almost got a heatstroke in the 4th scenario...well, we all experienced the pain.....no pain no gain, ika nga...buti nalang panalo tayo.*

*One thing I learned from this game is.....matindi ang zombie, I was playing fair pag sapul nako thats it! ... pero yung game ko sa 4th scenario, nakipagharapan nako sa zombie..inisprayan na namin ang isat-isa. Sapul na sya hindi pa umamin! ako lumabas na sa area..samantalang sya makapal!...argggh....sana ayusin nila ang style nila sa paglalaro...or maybe they want to make a career out of it kaya ayaw magpatalo... this is just for fun and recreation so let's be fair!"*



**Mike Tolentino aka mico\_mico**  
Team Techno Warriors (North)

*"In spite of the exhausting heat and wearing black BDU's like an over steamed siopao, we still managed to engage with tactics as planned in coordination with other excellent north teams. They helped plan squad placements with us with our mini chess board couple of days before the actual game. We expected that we will surely be outnumbered, but we didn't bother thinking that way, we knew that this will be an enjoyable day, and so we had couple of beers. Cheers!"*



**Jonathan F. Cabarrus aka Shadowpersona**  
Team Navy Seals (North)



*"We had a blast! Despite the scorching heat and all the many players who cramped up in the small gamesite of AAZ, MFR succesfully held on until the end."*

**Victorio Antonio aka Talahib**  
Team Marine Force Recon (South)





*"It was all worth it. Yung pagod, yung biyahe, yung init kasi you get to meet and play with those people na nakaka-usap mo lang noon sa Forums. That day, nobody was thinking ACM lang ang baril ko o mababa lang ang FPS ko, what everybody wants is to play & play harder. Everyone did. That's why nag-enjoy kaming lahat."*

**Sherwin Velez aka pyromasta**  
Team S.W.A.K. (South)



*"truly one of the most successful events in philippine airsoft history.."*

**Ryan Raquino**  
makati airsoft group (South)



*"The 'AAZ North vs South Death March' was a killer but experiencing it before and after the heat of the battle, I am sure that this made all of us more aware of how to be passionate about this game!"*

**Tony Alonzo**  
**Maj VP Jackryan**  
Team Cobra (South)

*"Lupit ng event na ito, the biggest skirmish na*

*naexperience ko!!!" (honestly sobra init .... tupok na tupok kami sa ilalim ng araw!!! pero sulit)*

**Michael Villaruel**  
**aka Solomonik**  
Team Cougar (North)





# ZOMBIES ARE FOR REAL

ARE YOU SPORTY  
OR SPOOKY?

**Z**ombies do exist. But they are not the spooky, ghost-like creatures you see on TV or the silver screen. These are the players that don't acknowledge the numerous rapid force of BBs' hitting them.

The God-mode type, if you will. But let's give them the "benefit of the doubt." Besides this is a gentlemen's game and everybody is expected to be a sport.

Here are some of the reasons why they do exist.

Because airsoft BBs' strike with only a fraction of the impact of paintballs and do not leave a mark on the clothing, disputes sometimes arises as to whether an enemy operator or a player has been hit or not.

In the heat of battle, a player may sometimes not feel a BB hitting him. The most common reason is adrenaline. Sometimes players are so focused on their objective that they simply do not feel the hit.

There are many examples of this in real life combat. A soldier may be grazed by a bullet and not notice it until later. Also, when players are making a run for a flag or for cover, it's difficult for them to feel the hits because they are moving quickly.

Equipment such as tactical gear or a tactical vest may also prevent a player from feeling a hit. However, in most cases, BBs' hitting someone's equipment makes a distinct sound, and both opposing players usually hear this.

This can also happen to someone wearing heavy garments. However, hits on clothing are usually more difficult to hear. Also, if you are shooting your opponent at longer ranges, the BB may not be hitting the person hard enough for him to even notice.

On the other hand, there may be situations that a gun operator thinks he hit his opponent but in reality he hasn't. The most common one is long-distance shot. To the shooting operator it may look like he's hitting his target but in reality his BBs' are falling short of their target.

Another thing that can create a false sense of a hit are the bushes. Bushes can easily deflect a shot. In rare cases a player can miss someone even at close range. In his excitement to shoot his enemy, players sometimes spray their guns wildly and hit everything except the target. ●



THE BATTLES

# AGEL WARRIOR OVERRIDES THE BORN

by Randy Caluag







# 100RS ANY

"It was a tactical training for their men. And it's the closest they could get to a real firefight without somebody getting hurt"

A1075044

AirsoftXtreme



19







**I** was sitting beside the M50 gunner on top of one of the two Armored Personnel Carriers cruising slowly along well-paved roads, when I suddenly heard a loud explosion.

The other APC behind us was hit by mortar fire, instantly rendering the troops inside incapable of continuing the mission.

It was an ambush!

The troopers in our APC got off and engaged the enemies.

I, the only journalist to cover the “encounter”, was still sitting idly as I watched the M50 gunner vent his ire on the enemies hiding under the bush.

I was caught in the crossfire, but of course, I was not frightened. The Army men and their “ambushers” from the Action Games League were just using Airsoft guns

and plastic pellets for bullets.

It was one of the situations created for the protagonists in the Airsoft war games set by the AGL and the Philippine Army's 1st Mobile Infantry Battalion under the Command of Lt. Col. Edgar Labetoria, held recently at the Philippine Army Adventure Camp at the Fort Bonifacio.

The weekend warriors were just as excited to test their mettle against the government troops, who were veterans of numerous real-life combat battles. These were the men who experienced how to put their lives on the line—and survived.

Despite the heavy rain that halted the morning sessions, the government troops and their opponents enjoyed the lunch-time break's *boodle-fight*—an Army's tradition where the troopers and officials share sumptuous meal on banana leaves, eating with their bare hands.

The site turned muddy but training officer Capt. Rommel Perena liked it better. And the afternoon action continued with the scenarios



Lt. Col. Edgar Labetoria





he created for the games, including the ambush situations, hostage rescue operation and chance encounter.

The weekend warriors from the AGL played as "rebels" or the opposition force.

In this game, there was no umpire. Honesty came into fore. Once a gamer is hit by a pellet, he simply acknowledges it by raising his hands, then staying down on the same place where he was hit.

True to their forms, the Army men accomplished all their missions, probably their way of proving that there's no substitute to experience.

For the Army, it was more than just a game. It was a tactical training for their men. And it's the closest they could get to a real firefight without somebody getting hurt. "We're giving the Army the best option to use cheap training tools in force-on-force contact training".

Paintball and laser guns (the ones used in the reality show Combat Mission) are more expensive. The Army is very dependent on

available supplies. They could not use real bullets every time," said AGL president and founder Rex A. Villarosa.

The one-day event was actually a replacement to inter-company sportsfest regularly held for the troopers.

"They decided to hold this kind of activity where they will develop camaraderie and their skills, and at the same time enjoy the day," added Rex.

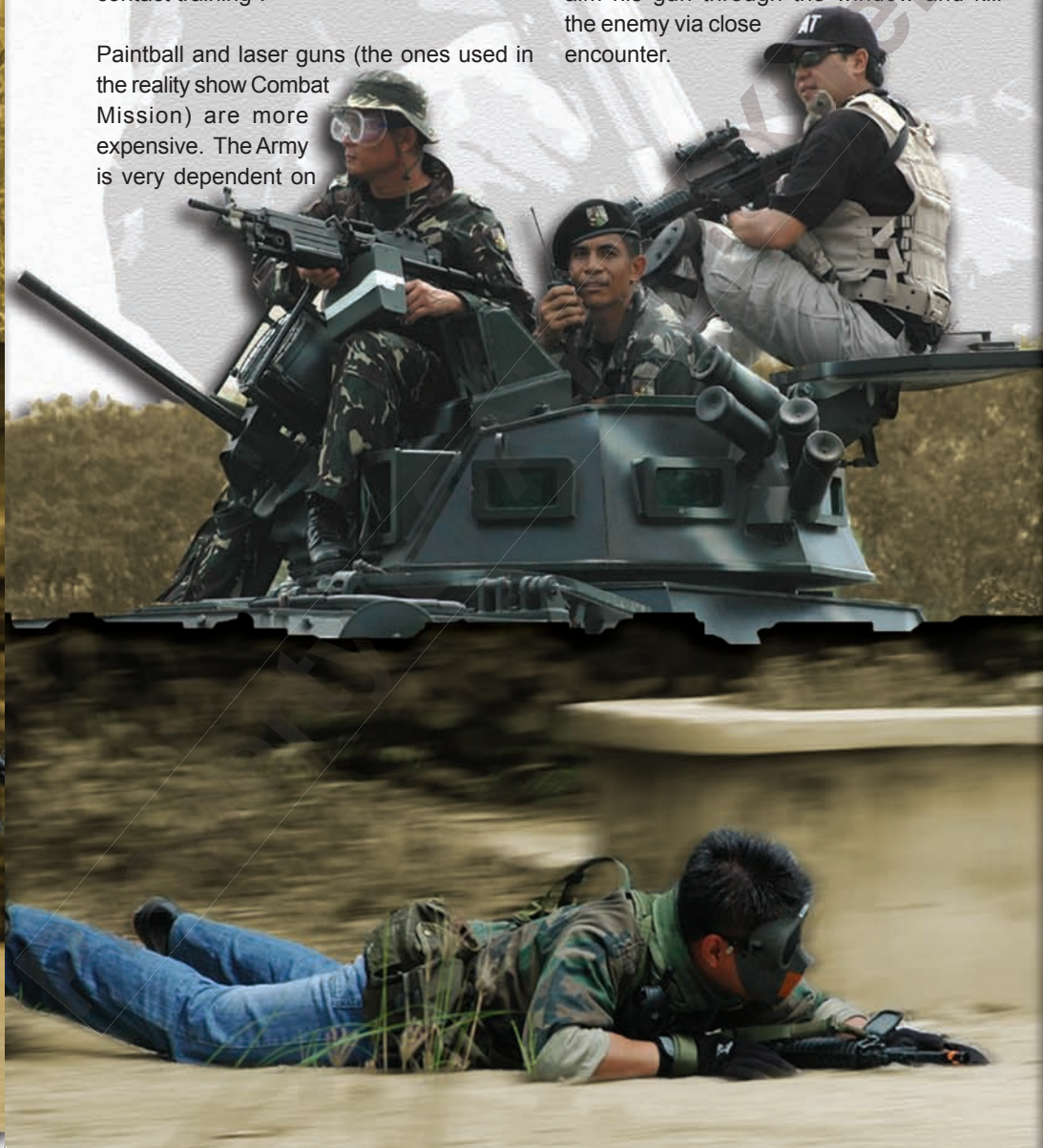
Of course, Airsoft is not a hundred percent fool-proof.

Consider: an M50 handler mounted at the Armored Personnel Carrier could have easily dismantled a dilapidated house where an enemy was taking refuge.

Airsoft plastic pellets, which served as bullets, could not even pierce through thin plywood. So, an infantry man had to attack the house, aim his gun through the window and kill the enemy via close encounter.

In the final mission where the Army had to overrun an enemy camp, two Army men made premature attack by pursuing several attackers. It turned out, they only played decoy and lured the troops into their "death."

But the more battle-scarred Army men wouldn't be denied. Aided by the M50 gunner, they pressed the attack and accomplished their mission just before dusk. ●



Airsoft Xtreme



21





# HAND SIGNALS

**T**he best way to achieve a successful game play is through stealth movement. And this is usually done by SWAT and special forces personnel using hand signals. This will enable your team to execute desirable tactics without allowing your opponents to know your next move. Here are some of the signals used by Airsoft players:



Enemy on that direction



Enemy with a pistol ahead



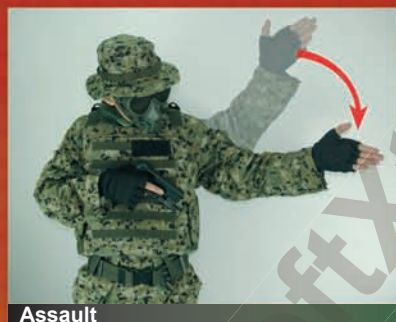
Come



Sniper



Listen



Assault



Me



Enemy with a rifle ahead



Got visuals



Watch



Hold/Freeze



Stop



Rally



Get ready



Enemy scout ahead

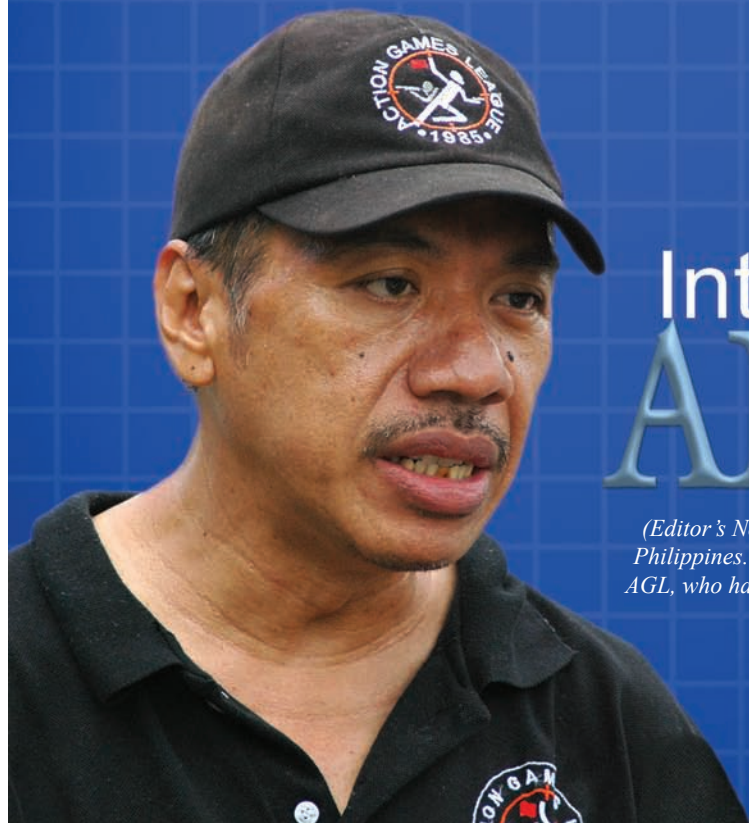


Make a radio call



OK





# Interview with ALMIGHTY

*(Editor's Note: Rexavier A. Villarosa a.k.a Almighty is known to be the father of Airsoft in the Philippines. He's been an airsofter for over 20 years now. He is one of the founding members of AGL, who happens to be the oldest group and pillars in the field of Airsoft. Below is an excerpt of an exclusive interview done by AX Magazine).*

**AX :** How did AGL (Action Games League) started?

**Almighty :** It started in my family. During weekends especially on Sundays when our parents are out. We play inside the house. We invite our friends and then pretty soon we go look for other opponents from outside. To complete the gears needed for the game, we were able to convince a small shop in Greenhills to provide us with the imported equipment. We tried to convince some of the buyers to play with us and that started off the recruitment and team organizing. It began with 4 to 5 groups in Metro-Manila. Then we decided to meet and then standardize rules of the game. We chose from a long list of names, and we all agreed to call it Action Games League. But Airsoft is our main activity. We just integrate whatever skills and sports we knew.

**AX :** How big is AGL now?

**Almighty :** Actually I have no idea. But I remember during the early 90's we had a roster of over 300 people. Right now we have an active group of about 50. But

let's face it, people come and go. Half of our core group are already seniors, those people who started playing late 80's and mid 90's. We just retained our common denominator which is the GAME per se. That's the reason why some of us are still here.

**AX :** What kind of guns do you use during the early days?

**Almighty :** Before, we used the exotic ones to gas type guns. We only use the pistols. We don't even use protections. *Teka..teka lang kami noon.* If something happens to you, it's on your own look out.

**AX :** Can you compare the guns you use before and the ones roaming around now?

**Almighty :** Today it is more commercialized because people dress-up their own guns.

**AX :** They said that there's a discrimination between the high-enders guns and the ACM or All China Made guns, how do you feel about it?

**Almighty :** We can't avoid that. Discrimination already existed even before the advent of the ACM. But we can point our fingers to the dealers or sellers who marginalized the market based on the quality, price and where the product came from. If only sellers will remain sellers, there will be no discrimination.

**AX :** Now with the advent of cheaper guns, could you say that there have been an increase with the number of players?

**Almighty :** Yes, because it became available to everyone. With Just 5 thousand pesos, you can now have an ACM gun and you can already play. Whereas for high-enders, you need to invest at least 14 to 20 thousand pesos.

**AX :** How many guns do you own to date?

**Almighty :** About 120 pieces. 10 of those are electric and the rest are gas guns. But I started with only 3 guns. I tend to just keep some of my guns and don't use it anymore because these are collectors' items already.



**AX :** Do you do your own upgrade?

**Almighty :** I had to. Because when I started, there were no gunsmiths. Infact there were no Airsoft stores. I had to convince a boutique owned by a Japanese to bring in the guns for me and he was kind enough to provide me with the catalogue. There were few Airsoft guns being sold by hobby shops, but they were not selling parts and upgrades. So I have to do my own upgrade.

**AX :** What is your most unforgettable experience in playing Airsoft?

**Almighty :** When I was running after an enemy in a grassy area, it was dark and I fell into a septic tank which I thought was a fox hole.

**AX :** Do you still play the game?

**Almighty :** Yes, if I find the game itself or the scenario interesting.

**AX :** What position do you usually play?

**Almighty :** I like being a sniper, because you operate alone and I used to hit a lot of enemies. But I can also be a team player and a good follower to a team leader who knows what he is doing.

**AX :** Do you consider Airsoft as a sport?

**Almighty :** It's actually a combination of recreation and sports. Recreation in the sense that it does not require a commitment on the part of the participant. You don't have to undergo a training. Though it's nice to train as a group.

**AX :** Your parting words for the Airsoft enthusiast?

**Almighty :** I wish people would go into Airsoft more as a hobby than making money out of it. There's nothing wrong with making business out of Airsoft but, it should not be the reason why you're into this activity. ●

A photo opportunity with the Almighty.



## Newbie Facts

Airsoft is a term used interchangeably to refer to one or both of the following subjects:

- A game in which players participate in the simulation of military or law enforcement combat with replica military firearms and military-style tactics
- A replica firearm scaled either 1:1 (or perhaps as a "mini" or "3/4") used in said games. (These are sometimes referred to as soft air guns, to differentiate them from standard pellet-firing air guns.)

Airsoft replicas may be made of metal, plastic, or, most often, a combination of the two. Airsoft replicas, also commonly called "airsoft guns" usually fire 6 mm or 8 mm spherical projectiles known as "BB"s (Ballistic Balls). BBs are available in many different weights ranging from 0.12 grams to 0.88 grams, but the most commonly used weights are 0.2 gram and 0.25 gram weights selected for their good combinations of range and accuracy. (lighter BBs generally travel further overall, but are more affected by wind, resulting in less overall accuracy at a given distance).

The game is very popular in several Asian regions, such as Japan, China, Hong Kong, Taiwan, Macau, Singapore, South Korea, and to a certain extent, the Philippines and Indonesia, where firearms are difficult or impossible to obtain due to local laws. For this reason, the vast majority of airsoft guns, accessories, and aftermarket upgrade parts are made in these countries. Airsoft is legal on mainland China, despite rumors to the contrary.

There is currently a growing interest in the West, especially in the United States, Canada, United Kingdom, Germany, Austria, Switzerland, France, Spain, Poland, Portugal, Sweden, Finland, Norway, Italy, Belgium (where the Dutch players also go, since in the Netherlands it is illegal), and Denmark, bolstered by an active and expanding Internet scene. ●





# HISTORY of AIRSOFT in the Philippines

*Since many Airsofters are not aware of the beginnings of airsoft in the country, where it came from and how did it evolved, AX decided to lift this article which came out from the first issue of HIT Magazine, published last 2004. The chronology was based from the recollection of Rex, known from his fellow airsofter as Almighty, the Father of Airsoft.*

*(Author's preface: Our being the first team around inevitably intertwined our group history with the early chapters of Philippine airsoft till present day. Having no foresight that we would last this long, no one had bothered to record the events as they happened. So, almost in the traditional manner of balladeers and storytellers passing on historical accounts thru songs and stories retold, the following is from the author's personal account of how airsoft began in the country, as best as can be recalled from memory. Dates and some chronology may be a little off, but accounts of events and circumstances are generally accurate).*

## THE BEGINNING

A long time ago, in a place  
not so far, far away...

A band of five brothers decided  
to stay home on the weekend, and  
pass the time away by playing good and  
bad guys shooting it out like in the movies.

To the tune of Beverly Hills Cop theme (Axel Foley)  
blaring on the audio system, the boys and friends ran  
up, down, in, out and around the house, out into the street,  
and over fences into neighbors' yards, trying to tag each other  
using toy guns that fired 6mm hard plastic BBs...





**T**hus, in the summer of 1985, the brothers (the author included), known then as Team Gypsy, started a game that they would be playing every weekend for the following years. Scouting around for new guns, as well as uniforms and equipment, they met new people who they introduced into their newfound weekend adventure. **Airsoft wargaming in the Philippines was born.**

Chancing to meet the owners of Tokyo Hanna in Greenhills, the group managed to convince the latter to import better airsoft guns for the team as well as sell to other potential customers. They did, and as Tokyo Hanna got more customers, the number of players started growing and new teams started to form - a mostly Chinese family/peer group from San Juan (later to form People's Park Airsoft Group (PPAG) in Quezon City), a family/peer group from Malabon (to resurface as Northern Alliance in Bulacan), and a student peer group from Las Salle Taft (to fade, but give birth to different small groups spread all over).

With team representatives from the Malabon, Quezon City, Manila, San Juan and Pasig, Action Games League (AGL) was formed to standardize the game rules, centralize game organizing, and promote airsoft as a hobby. It was probably the first airsoft organization outside Japan and the rest of the world.

Courtesy of the PPAG founders, the first team vs. team game (also the first ever night game) was played in the unfinished portions of Gilmore Townhomes in San Juan. It was followed by regular Sunday games in a steel mill turned lumber warehouse in Quezon City. Games were played anywhere and everywhere – on any piece of property.

The demand for airsoft guns stripped shelves of the few existing stocks. Other stores, like Lil's Hobby Shop and Special Toys Center took notice and followed suit in offering airsoft items. Because of it, more players turned up.

Every once in a while, the game would head up to Valdez Farm (now the Lopez-owned "The Center" convention facility) in Antipolo where the group would invite other teams and new people to play with us. It was in a couple of AGL games in Valdez that we

met and played with the would-be proprietor of GOTCHA, the first commercial paintball operator in the Philippines, which came out in 1989. That should lay to rest any question now as to which came first - airsoft or paintball?

In December 1989, AGL operated an airsoft game booth in Payanig sa Pasig during the Christmas season carnival. The roughly 1000 sq.m. battleground was enclosed by fine mesh see-through net and attracted sizable crowds. It was the first time airsoft was exposed to the general public. In it's roughly 6 weeks of operation, the Payanig airsoft arena successfully imprinted the game into the subconscious of innumerable spectators. Some of them, just now actively playing, recount how that carnival game influenced them to go into airsoft even after a long time.

Then came the 1st Ammunition and Defense Fair in Philcite, July 1990. AGL managed to get the organizer to allow an airsoft display alongside real firearms. To boost, the organizer even provided a 3000 sq.m. game demonstration playfield right outside the building.

Though actual recruitment during the event was small, our efforts paid off when airsoft gaming was featured (October 1990) on Channel 2's morning program "Magandang Umaga" – the very first media documentary on airsoft in the country. The success of the undertaking rewarded AGL with its own slot in the following year's defense fair, as well as another participation when it transferred venue to Mega Mall.

In March 1991, AGL first set foot on Rolling Hills Resort. Located on the Montalban foothills of the Sierra Madre, it was to be our "home" for the next 8 years. During that time, Rolling Hills became Mecca to every team and every single player to enter airsoft. This included the guys from Marikina who came to be nicknamed the Marikina Boys, (currently known by their team name – Moby Dix) by this time, PPAG had formed (based in the People Park commercial arcade fronting SM City North EDSA) and they too often went to Montalban to play. Over time, the regular Sunday attendance rose from lowly 20-something to over 200 (during 1993). The first overnight bivouac was played there in March 1992. It was there also that the first airsoft team competition, the 15-man Team

Challenge, was launched in May 1993. Rolling Hills was background to two different episode features on the tv/cable sport program Gameplan. The media exposure was recruitment windfall for AGL, as well as the other teams.

By 1992, AGL's original sub-teams have since dissolved and its members assimilated into one homogenous body that others preferred to recognize as a single team organization. Late that year, AGL, Nemesis, Recon, People's Park, Renegade (spun off from PPAG) grouped together to form the AirSoft Association of the Philippines (ASAP) – another try at putting all airsoft teams under one operational umbrella. The 15-man Team Challenge was ASAP's first project aimed at proving that the different groups could engage in friendly competition. Unfortunately, it failed. Minus AGL, the other groups then formed the National AirSoft Society (NASS), spearheaded by new AGL spin off - Stormtroopers AirSoft Group (STAG), and the addition of Meycauayan AirSoft Club (MASK). This attempt at another umbrella lasted longer – around 2-3 years – before effectively fizzling out.

Senator Biazon's grandstanding in the Senate about realistic looking toy guns (despite his son being an airsoft player himself), Senator Orly Mercado's advocating a ban on of toy guns, plus local ordinances to the same effect, pushed the local airsoft hobby underground. Despite these, AGL still managed to organize games inside Camp John Hay in Baguio twice, and in Subic Naval Magazine, 3 times. From 1994 onward, player attendance slowly dwindled and numerous squad sized teams disappeared. Through the decline, airsoft wargaming thrived in the hearts of a hardy few who kept playing on discreetly.

Rolling Hills Resort was sold sometime 1999 and AGL moved the game to a scrap metal yard in Balintawak, and eventually to the PUP campus in Sta. Mesa. For about 8 months, from 1999 to 1st quarter 2000, AGL was able to use the abandoned residential area of Fort Bonifacio (now site of International School – Manila, the British School, and Market Market). The venue attracted many players back into the game, reviving old squads, reinvigorating the surviving teams, and enticing new blood. It was there that a





returning AGL veteran brought his barkada which eventually formed team Wyvern, and its all female sub-team Power Puff Girls (PPG). Wyvern eventually disbanded and re-organized as Fenris. On its own, at the same time, RASTA was forming up and playing over at the Navy Compound of Fort Bonifacio. RSGC spun out Trinity (now disbanded), later on - Recon 1st Battalion (R1B), and got reduced to a small team unit (still playing in Tropical Palace). Present team 101st Airborne was formed by ex-RSGC Anthony.

In Pampanga, local team Semper Fi, came to be an AGL chapter (for a while) and upon exposure to the other metropolitan groups, eventually became a part of the popular "airsoft community." Down south, AirSoft Games established presence, first in Cebu and then in the other southern provinces. Though their development was separate and independent of Manila teams, some of their founders trace their initial airsoft exposure back to Metro Manila during the "Tokyo Hanna Days". Omega Zone, a group initially targeted for Internet professionals, was formed by players, one of whom professed to have started playing in Montalban.

A lot seemed to have happened from 2000 to 2002. AGL reintroduced the 2-day bivouac game while playing on Grande Island, with Wyvern and Semper Fi in attendance. While playing in the PNR train repair facility in Sangandaan, Caloocan, the group was featured in Gameplan (third time around). AGL also made the first adaptations of the reality program "Combat Missions" for scenario based team contest. The first, "Pilot Rescue", was sponsored by a cable network, and the second, "Drug Bust" was documented and shown in Gameplan (AGL's fourth time!). AGL opened the historic Corregidor Island to airsoft playing.

Meantime, the old-time groups Trinity, R1B and STAG got together with new teams Wyvern, RASTA, Semper Fi, and OZ to form a third try at an airsoft umbrella, with a patriotic acronym at that – the Philippine National Airsoft Society (PNAS). So far, into its fourth year, it has outlasted the two previous attempts, and lives on thru its trademark event – the KALIS airsoft team competition, now also going into its fourth run.

Flashing back to around October 1990, AGL entered a team into GOTCHA's 1st Philippine

Paintball Cup, if only to prove that airsoft players can play paintball as well. Using only rental guns, with a load limit of 40 balls each, despite the odds, the airsofters put forth a valiant effort. In the end, they were sidelined and beaten due mostly to equipment failure and stuck-together ammo because of the rain. Some six years later, AGL once again entered a paintball tournament - the UP Speedball Open, held in the UP football Field – this time, with three teams. AGL came out overall champion, with the other two teams taking 3rd and 4th place in a field of six. The victory was recorded and shown on television by, none other than, Gameplan.

"Any large group is hard to manage and keep under control. The larger the number, the more people with their own ideas of running things and feelings of self-determination." In addition to previous break-aways, AGL teams Tomahawk and Rainbow went on their own to form Spec War in August 2001, and mid-2003, Black Ops declared its own independence. Other teams also suffered the same fate. Earlier, Nemesis spun off Recon which, in turn, spun off team Trinity, while the remaining split into R1B and RSGC.

Other Nemesis members are now scattered among different teams among which is Sitting Ducks. Wyvern had spun off Fenris, and its original members now either inactive or mixed in with other groups. Team Black Ops itself split into 4 groups, giving rise to Elite Kommandos Tactical Airsoft (EKTA), BOD, and Dragons aside from its current self. Even OZ was not spared – it just recently gave rise to Team Raptor. Just recently, relative newbie team Murder of Crows split and produced team Atlas.

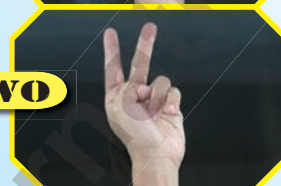
The Internet was instrumental in local airsoft renaissance at the turn of the millenium. It brought exposure to airsoft hardware, the game, the teams much wider and faster than conventional word-of-mouth. Online communication bridged across physical boundaries and far distances. The renewed and growing public interest in airsoft inspired a number of people to venture into the airsoft business. In turn, increased availability of airsoft fueled an even greater growth in player and team numbers. Airsoft spread like wildfire. Over the last couple of years, we have seen unprecedented increase of players. New teams have formed, some have split, merged, reorganized, and disappeared only to be replaced by several new ones. ●

## HAND SIGNALS

ONE



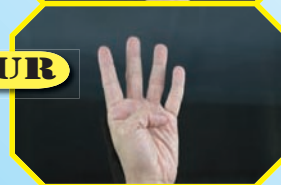
TWO



THREE



FOUR



FIVE



SIX



SEVEN



EIGHT



NINE



TEN



Source: www.cimmerians.org



# PRINCIPLES OF

**T**he principle behind BB guns is pretty much the same as in firearms, except there is no explosion. The expanding matter is ordinary air, carbon dioxide or some other gas.

Before you fire the gun, the gas is compressed so that it has a greater density, and consequently a greater pressure than the air in the atmosphere outside the gun. The compressed gas is stored in an airtight container until you pull the trigger.

This opens up the gas container so the gas can flow out into the barrel, just behind the BB. Since it is more compressed, the gas behind the BB pushes out with greater force than the air in the atmosphere pushes in, and the BB is propelled forward at great speed. This is the idea behind all gas-powered guns, including high-powered air rifles and paintball markers.

There are several different air-gun

designs, which differ mainly in the source of the compressed air. Some air guns don't have any sort of pump action. The gas is pre-compressed and stored in cylinders, like the air in a scuba tank. To shoot the BB, the



# BALLISTICS

gun mechanism just has to open the pathway between this gas source and the chamber behind the BB.

Air-gun designs differ mainly due to the compressed air. Some use a pumping action to build up pressure and some use pre-compressed air which is stored in cylinders. These cylinders fit on the gun and release short bursts of air to propel the BB.

Before each shot, most BB guns have to be cocked. A BB gun most likely cannot accidentally fire without being cocked first. This makes them safer than other guns. But no gun, BB or otherwise, should be left where young children can get to them. And it is recommended that you always utilize a trigger lock when storing your

weights ranging from 0.12 to 0.43 grams.

In addition to standard plastic pellets, starch-based biodegradable, metal coated, and graphite coated (often used by snipers), steel pellets are also available. Pellets other than 6 mm, 0.12 g, 0.20 g, or 0.25 g plastic or biodegradable pellets are not commonly used outside of Japan. For 0.43 g BB's, you will need a powerful airsoft gun, or get upgrades on your gun so that it can effectively shoot this heavy BB.

## 6 mm pellet weights and their usage

- 0.12 g - Used by some gas and spring weapons. High velocity and low stability. Not to be used in high end AEGs such as Tokyo Marui and Classic Army
- 0.15 g - Same uses as 0.12 g. Uncommon. Not to be used in high end AEGs such as Tokyo Marui and Classic Army
- 0.20 g - Standard weight for most weapons. AEGs uses these or slightly heavier pellets.
- 0.23 g - Heavier pellets for AEGs. Blends speed of 0.20 g with range and accuracy of 0.25 g.
- 0.25 g - Heaviest weight for standard AEGs, blowback and spring guns. For some AEGs, you will usually need an upgrade to effectively fire 0.25 gram BB's. Tokyo Marui standard AEG, gas, and spring weapons use 0.25 gram BB's. For Tokyo Marui airsoft, they usually send 200 of these with one of their AEGs and spring guns.
- 0.28 g - Standard weight for highly upgraded AEGs or sniper rifles. Significantly cheaper than .30g , but yields similar performance
- 0.30 g - Standard weight for most sniper

weapon. It is best to keep them locked in a gun case.

You should always unload your gun before storage. Removing the BB's reduces the risk of someone accidentally shooting another person or animal. Also, never point the gun at anything but the ground until you are ready to shoot it. Being careful and observing all the safety precautions will help prevent you from hurting yourself or someone else.

Airsoft pellets are typically made of plastic and are almost always 6 mm (5.98mm) spheres. Pellets of a given size come in different



# PRINCIPLES OF

rifles. Western Arms pellets for their gas blowback pistol series. Uncommon.

- 0.36 g - Heavier pellets for sniper rifles. Very slow but have high stability.
- 0.43 g - For the highest level of upgrades in spring and gas sniper rifles. Usually graphite coated.

## 8 mm pellet weights and their usage

- 0.34 g - Low weight for 8 mm sniper rifles.
- 0.45 g - Standard weight for 8 mm sniper rifles.
- 0.60 g - Heaviest weight for 8 mm sniper rifles.

NOTE : All BB masses in grams (g)

## Hop-up & Bernoulli's principle

Bernoulli's principle as applied to an airsoft pellet is as follows.

As a spinless spherical pellet flies along its trajectory through the air (the air being the "fluid" in this case) the pressures on all sides of the pellet are equal because the air is traveling the same velocity relative to the surface of the pellet.

If a spin is applied to the pellet about an axis perpendicular to the velocity vector (i.e. a backspin) the air will be rushing faster (relative to the pellet surface) on the side that is spinning away from the velocity vector and slower on the side that is spinning towards the velocity vector. Bernoulli's principle says this difference in fluid velocity implies a difference in pressures, which is a force that will cause the pellet to move in a direction perpendicular to the velocity vector.

Airsoft hop-up devices apply a backspin to the pellet so that the pressure force acts on the pellet opposite to the

direction that gravity is pulling it. This causes the pellet to fall less over a given distance than it would without the spin applied to it.

In airsoft guns this is often implemented as a rubber piece at the rear of the barrel that is thicker at the top of the barrel than the bottom. As the pellet moves past this piece it tends to roll, inducing a backspin. This is usually adjustable so that the effect can be tuned.

Bernoulli's principle is often misapplied in the case of spinning balls. The real cause of the lift on an airsoft pellet is the Magnus

Effect. There is a layer of non-moving air on the surface of the pellet (boundary layer). This is why a golf ball has dimples; this layer acts like ball bearings.

With the case of a spinning ball, this layer gets thrown off at an angle. Newton's laws say that in order for air to be thrown in one direction, the ball has to move in the other direction. In the case of a pellet spinning with a backspin, Bernoulli would predict that the ball would move downward because the bottom of the pellet is moving in the same direction that the pellet is moving and therefore less pressure would be present on the bottom of the pellet and it would drop.

We know that this is not true. Also, the Bernoulli explanation requires that the object be moving through the air as well as spinning. This is not true either. A spinning object that is not moving will also experience Magnus Forces. According to the Magnus explanation, the rotating ball

would throw air downward and to the rear, thus giving lift. The air on the bottom of the ball is slowed down, so when the separated air comes back together, it is lower than the middle of the ball appearing like a comet's tail pointing down.

## Pellet Ballistics

### Pellet velocity, energy and weight

The pellet velocity of automatic electric guns is determined in large part by the tension of their main spring and so there tends to be a stratification of

values. The most common airsoft velocity limits are between 300 to 400 fps for AEGs and 400 to 500 fps for single shot guns (sniper rifles). Here are some common levels of airsoft gun pellet velocity. ●



# BALLISTICS

## Unit equivalents

Pellet velocity	76	84	85	91	100	107	115	122	137	152	168	(m/s)
	250	275	280	300	328	350	377	400	450	500	550	(ft/s)
<b>Weight</b>												
<b>6 mm pellets</b>												
0,12 g	0,35	0,42	0,44	0,50	0,60	0,68	0,79	0,89	1,13	1,39	1,69	
0,15 g	0,44	0,53	0,55	0,63	0,75	0,85	0,99	1,11	1,41	1,74	2,11	
0,20 g	0,58	0,70	0,73	0,84	1,00	1,14	1,32	1,49	1,88	2,32	2,81	6 mm Crony
0,23 g	0,67	0,81	0,84	0,96	1,15	1,31	1,52	1,71	2,16	2,67	3,23	
0,25 g	0,73	0,88	0,91	1,05	1,25	1,42	1,65	1,86	2,35	2,90	3,51	
0,30 g	0,87	1,05	1,09	1,25	1,50	1,71	1,98	2,23	2,82	3,48	4,22	Energy
0,36 g	1,05	1,26	1,31	1,51	1,80	2,05	2,38	2,68	3,39	4,18	5,06	(J)
0,43 g	1,25	1,51	1,57	1,80	2,15	2,45	2,84	3,20	4,04	4,99	6,04	
<b>8 mm pellets</b>												
0,34 g	0,99	1,19	1,24	1,42	1,70	1,93	2,24	2,53	3,20	3,95	4,78	
0,45 g	1,31	1,58	1,64	1,88	2,25	2,56	2,97	3,34	4,23	5,23	6,32	8 mm Crony
0,60 g	1,74	2,11	2,19	2,51	3,00	3,41	3,96	4,46	5,64	6,97	8,43	
<b>Paintball pellets</b>												
3,00 g	8,71	10,54	10,93	12,54	14,99							

### NOTES:

- 3.00 g is the typical weight for a paintball pellet. This weight is for comparison purposes only and is not used on Airsoft. Higher energy but different collisions read Elastic collisions (airsoft) and Inelastic collision (paintball) topics for further information.
- Red lines are the usual Crony (cronograph) weights for 6mm - 0,20 g and 8mm - 0,45 g.



# What you should know as a Newbie.....

**W**hen you are dead serious in engaging into this kind of sport, then it is better for you to come prepared and know the basics of being an **AIRSOFTER**.

## **PREPARATION:**

Check and double check first the gun that you're going to use and bring for a game. Besides, what the heck are you suppose to do in the game site if you don't have a gun?

Although some game sites offers gun rentals, I prefer brandishing my own gun. Why? Well just think of it as bringing your own girlfriend in a romantic date. I'm sure you wouldn't like to be with your buddy's date? (Get the point?)

Anyway, my first invitation was in an LPEG game. Meaning a game that only requires a low powered gun. LPEG means Low Powered Electric Gun. A lowered powered gun usually clocks from 90 up to a 200fps limit. Not bad if you're a newbie.

Because the fact is, an LPEG game scenario is suited to enhance or practice your military simulation skills in anticipation of better things to come. The most commonly used LPEG guns are the china made airsoft guns made of plastic gear boxes; Double Eagle M83 and the Golden Bow MP5 series. Although I used Well's M16A2 Springer.

Actually, it really doesn't matter as long as you have the self-discipline to follow the rules of the game (Which comes on the latter part of this article, so just read on and learn).

The cost of an ACM gun varies depending on where you bought it as well as the type and model of the gun. Latest models are more expensive, but just like the other commodities;

prices go down as time passes by.

The cost of airsoft guns in the provinces are relatively higher compared those sold in the Metro Manila area. But as a rule of thumb, more than double is outrageously high and no longer practical. (In this case, you might as well contact one of the gunrunners at the black market).

## **Prices of Airsoft guns:**

Both Elephant Steyr Aug	P 1,400.00 - P 1,600.00
Double M83	P 1,000.00 - P 1,100.00
KWC M16	P 3,000.00 - P 5,000.00
KWC Springer Pistols	P 800.00
CYMA Shotguns	P 85.00 - P 90.00

\*NOTE: These prices are subject to change.

## **WHEN YOU TRANSPORT THE GUN/s:**

Guns must be inside a case and not loaded. If possible, avoid using gun bags. Airsoft guns must be transported in a suitable case and must be securely covered at all times.

Use soft or hard casing that can be safely closed and locked. Or just simply cover your gun in a way that no part is visible or easily identifiable as a rifle.

Transport your airsoft gun only when you are going to a scheduled game or gamesite. Other than that, keep it at home!

If you have to walk in public with a gun case (i.e. going from the parking lot to an airsoft store), move quickly and go straight to your destination.

Avoid taking public transportation, such as the jeep, bus or taxi when transporting your airsoft gun. It should only be transported in a private vehicle to avoid alarming situations.

If possible, arrange a ride going to a game

or to an airsoft store. It is better to take the extra precautions rather than getting the police involved in your carelessness.

When you are in a private vehicle, put your gun case inside the trunk. If there is no trunk, then the case must be kept in the rearmost part of the vehicle, not visible to any possible passenger/s.

Make sure not to pass by any security check nor check points in some sensitive areas, such as airport and government facilities while carrying your gun/s.

When you are not going to transport your airsoft gun, it should be kept at home, locked inside a case. Store it with the mag out. Safety on, and with no batteries or gas connected, and keep it away from children.

By following these simple guidelines, you will keep yourself out of trouble and prevent being misunderstood by some airsoft enthusiasts and avoid any incident involving the authorities who enforces the law.

Airsoft is a kind of sports that we all love! As such, we must all together make an effort to ensure that airsoft guns are used safely by responsible players.

## **GEARING UP**

Facemask is the most essential gear one must bring and wear in a wargame. Even if you have a whopping Php25,000 hi-end gun but you don't have a mere Php800 facemask, sorry dude, you will not be allowed to play.

Even if you happen to elude the marshals and go ahead playing, I've got one word for you: stupidity. Because safety first is what this game is partly all about. The fun and adrenaline rush as well as the camaraderie



completes the picture.

### TAKING CARE OF YOUR GUN

Even though airsoft guns are considered toy guns, this must be coupled with a serious responsibility. If handled improperly, airsoft guns can cause serious injury or even death.

By following the basic gun safety rules you can keep yourself and those around you safe.

1. Never assume a gun is safe or unloaded.
2. Keep your finger off the trigger until you are ready to fire your gun. Even when the mag is out, there may be a BB left in the chamber.
3. Keep the mag out of the gun until you are ready to play.
4. Keep the safety ON until you are on the field, ready to play.
5. Always keep the gun pointed in a safe direction, away from other people.
6. Always use the designated shooting zone to test fire your gun when not in play.

Everytime a game is over and before you enter the staging area, remember...

1. For AEGs, remove the mag and fire a few shots in a safe direction to clear any BBs' that may still be inside the chamber. Keep the mag out of the gun and the safety ON until you are ready to play the next game.
2. For gas guns, remove the mag and pull the slide back to clear any remaining BBs.
3. Keep the mag out and the safety ON until you are ready to play the next game.

### AIRSOFT RULES:

The following are the rules our team has formulated. We are sharing these to our readers and fellow airsofters to serve as a guide. Sooner or later you will put up your own team, will choose your leaders and this shall be followed by making your very own rules.

### SAFETY

1. Airsoft guns using 6mm BB's must chrono 500 fps or less using .2 gram 6mm BB's. Any airsoft gun that exceeds the velocity limit will not be allowed in play.

2. Airsoft guns with adjustable hop-up must be set to a level flight path.

3. Bolt action, spring powered 6mm rifles must chrono 500 fps or less using .2 gram 6mm BB's. Any airsoft gun that exceeds the velocity limit will not be allowed in play.

4. Modified pellet/metal BB firing airguns or live firearms are not allowed during the play or at the playing field / gamesites.

5. All players must wear adequate head protection at all times. This means rigid protection over the eyes, as well as rigid or semi-rigid protection over the ears, nose, and mouth. No player will be allowed to enter the field without proper head protection.

6. Paintball face masks that provide full face and ear protection will be considered the minimum standard. Players are allowed to add decorative items to the paintball mask that do not pose a safety hazard. Players are not allowed to remove parts or modify the mask in any way that significantly compromises the protection provided.

7. Screen mesh goggles or masks will be allowed but they should be forewarned due to the likelihood of BB fragments causing eye injuries.

8. Head gear must not be removed while still on the ground or inside the game field, even if the game is over. There may be some players who continue to engage in a battle despite the signal of a game over, simply because they failed to hear the whistle.

9. If your head gear is damaged, replace it. If your face mask gets fogged while you are playing, do not take it off! If it has an elastic strap, try "flapping" it against your face (no more than an inch or so away) or, if you have small fingers, you might be able to get a finger into your mask without removing it in order to wipe the goggle section clean.

If none of these work and you can't clear up the problem by all means, call the nearest referee, and cry for help!

10. No shooting is allowed on the field before and after a game. You may test fire your guns only at firing zone.

11. No rubber or artificial / replica knives or weapons are allowed. No solid/foam headed grenade projectiles are allowed.

12. Covered shoes are required. Long pants and some sort of jacket are highly recommended.

13. Use of drugs or alcohol is highly prohibited in the field.

14. No open fires allowed.

### GAME/PLAY

1. If you are hit anywhere, you are eliminated from the game. This includes the things you carry.

2. Eliminated players don't talk.

3. Ricochets do NOT count.

#### \*\*Hits

-Hits to any part of your body is considered a kill.

-Hits to any part of your tactical gear or equipment, such as ammo bags, canteen, and pouches, etc. also count as a kill.

-Ricochets that hit you DO NOT count as a kill.

-Hits to the gun do not count as a kill.

4. Avoid swearing and overly aggressive "trash talk".

5. If you think you hit a player but they didn't acknowledge it, ask them if they were hit.

It helps to identify the specific player and where you think they were hit. If the player says they were not hit, SHOOT HIM AGAIN. If someone thinks they hit you, go ahead and call yourself "HIT" (you can always play in the next game). Remember, you may not feel or hear every hit.

4. When you have been eliminated, go to the staging area. While you are leaving the field, make sure to carry your gun over your head and call out something like: "Hit-dead man coming out" continuously until



you are out of the battle field.

5. If you are sure that someone is deliberately not taking hits, immediately call the attention of the marshal on site.
6. If you came across an enemy within 10 feet or so, ask him to surrender before you shoot. If they surrendered, they are automatically eliminated, no need to pull the trigger.  
  
If they don't surrender, you may then shoot them (be nice--no full-auto barrages). In the same way if you refuse to surrender to the enemy, you are likely to be shot at very close range and it will probably sting. Surrendering is optional for the "victim".
7. If you get within arm's reach of someone, don't shoot them, tag them instead. A tag is as good as a hit (anyone tagged is eliminated).
8. Stay in bounds while playing. Boundaries will be marked.
9. Players must not scatter from their starting points before the game starts. (Unless the marshal says they can.)
10. No going back to the dead zone/camp to reload during the game. You must carry with you all the ammo needed during the game.
11. The referee(s) on duty may change some of the minor safety rules listed above from one game to another. In every types of game, comes along a variety of rules to follow. If you are not familiar with the rules, ask the marshal.

#### Whistle Signals

- 1 whistle = Game starts.
- 2 whistles = Game Over. Players should stop shooting and head for the staging area.
- 3 whistles = Time-out or paused game. Players should suspend shooting, put their guns down and stay where they are. This is the whistle signal normally used when a hiker /non-player has entered the field

#### ENVIRONMENT

You must keep your guns (and other gear) concealed every time you are in public.

People have gotten into serious trouble for waving around toy guns where they shouldn't. You must dress up only for the play. You may wear casual or the ordinary clothes.

Be nice to the neighbors (people who live near the gamesites). Let's respect their privacy and don't do thing that would cause an alarm.

Don't tear up the foliage or do anything else detrimental to the area where you play.

Make sure you pick up any rubbish that you see. Clean as you go.

There will be a designated area near the safe zone where players can shoot (for fun, to test guns, whatever). You are not allowed to fire your gun anywhere else if you are not on the field engaged in a game.

If you want to use a smoke bomb, it must pass a safety check by a committee and you must get an approval from the marshal on duty before you may use it. Use of some sort of incendiary system will not be allowed, because it may cause fire.

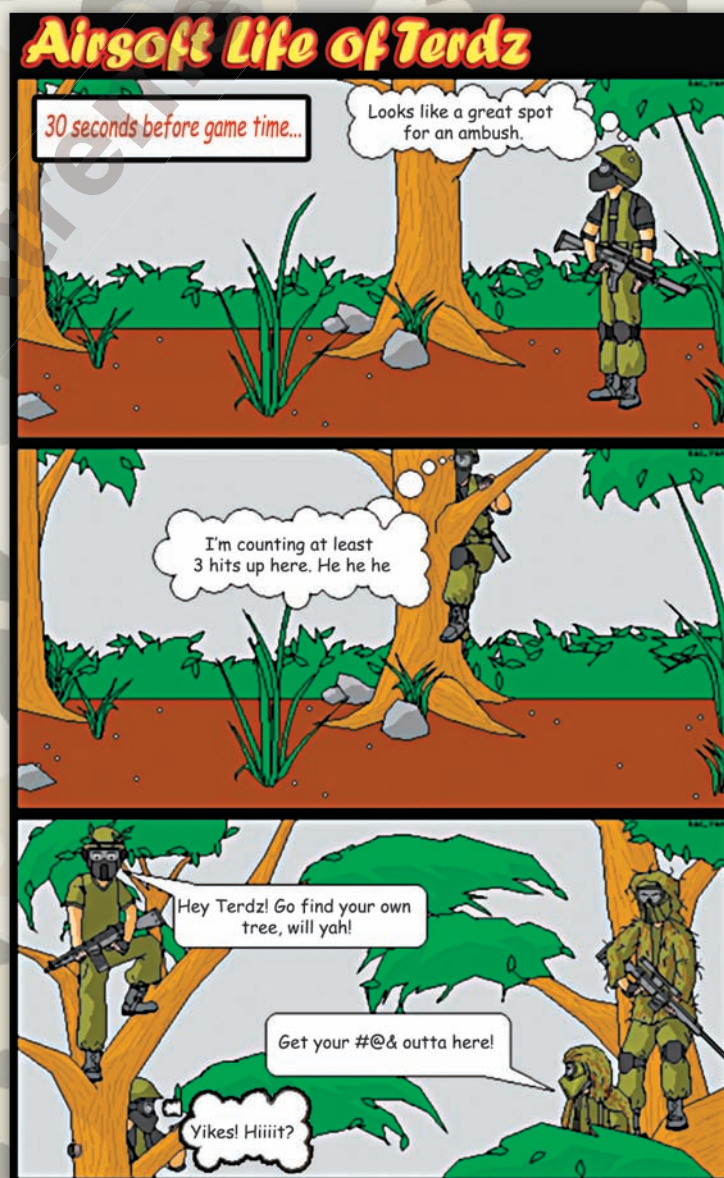
Use of explosives is prohibited, because these can cause injury. When you set off the smoke bomb, you may either drop it or toss it.

#### Others

Failure to follow the rules listed above will result to some penalties ranging from warnings to being called out of a game.

Respect the rules. Respect the marshals. The rules is implemented to avoid accidents and injuries.

For indoor games, always remember the surrender and tag rules. The maximum FPS is also likely to be lowered. Make sure you check with the marshal regarding these rules. ●



By: Ryan Subong



# GEAR UP

If you're going to walk the walk, you have to look the look. Well, you don't have to, but the fashionable airsoft today knows that a good set of BDU's (Battle Dress Uniform) not only provides a layer of protection against BB hits, but also makes you camera-ready for a potential sequel to Tears of the Sun!

Woodland camouflage is the most popular design, followed by the ever popular black SWAT look. BDU's come in a variety of materials, from polyester to cotton, and most are quite durable and should last you (at least half) the lifetime of your airsoft career.

The jacket and pants shouldn't cost you more than Php2000, otherwise you're getting the shorter end of the stick. If you're going to carry a sidearm, you'll need a holster. And if you're carrying a holster, you're probably going to want a belt.

When I say belt, I don't mean your black leather Perry Ellis that you got for Christmas. I mean a lightweight, nylon, adjustable belt that will keep your pants up and keep your gear in place. A good nylon belt should be around Php500. You can get all of these items at a place like Quiapo, Sta. Lucia, or Camp Crame along Santolan Avenue.

One of the absolute essentials to wear is your boots. If you expect to be running around all day in the woods, leave your flo-jo's and sandals at home.

Boots should be comfortable, protective,

and offer good ankle support. Look forward to paying anywhere from Php2500 for a decent pair of boots, but if you're paying more than Php4000, all you're getting over the rest of us is a rather



important face mask. Don't forget, boys and girls, BBs come at you at speeds upwards of 300fps.

If you've ever been shot in the arm from 30 feet away, imagine the hurt of getting nicked in the ear, hit in the eye, or snuffed in the head. I've heard stories about people getting their teeth knocked out, so keep those face masks on! Php800 just might save you a trip to the emergency room.



The rest of these items are just optional, but it never hurts to have them. I recommend them if you can afford it, but they can wait until you decide to break into your

expensive box.

I suppose sneakers will also do, but sneakers weren't made to be durable like

college fund (heh heh...). If you're going to be spending some extra money, a gun bag or gun case for your airsoft gun is never a bad bet.

After all, you're not supposed to be carrying any firearms around without some sort of case to keep it in anyway, and it's a sensible way to keep the gun protected.



boots, and will therefore wear out much faster. Also, Nikes or Merrels with any BDU's look about as good as Nikes with a suit (well, not THAT bad, but still...).

Another necessity for the game is the ever



A good case should have separate compartments for your magazines, BB's, and manuals, as well as a locking capability. However, if you will be playing in public areas either with your friends or with an organization, you MUST have some inconspicuous bag to keep your gun in. Depending on what you're looking for, you can spend a





whole lot or not a lot at all.

Speaking of protecting your guns, you'll be doing yourself a favor by getting silicon oil to lube up the moving parts, some cleaning fluid to keep the delicacies clean, and a gun cloth to mop up everything afterwards. But don't



bring more than enough into the store for these items. A load bearing vest will help you if you plan to be bringing in a whole lot of junk into a mission, but might cost you upwards of Php2000.

Lastly, if you're like the other guys who always do target practice at home, get yourself a sticky target or net target to practice with. Although both cost less than Php1000, I do suppose you can just make one out of an old shoebox...

# TECHJARGON

## BDU - Battle Dress Uniform

The name given to the clothing worn by a protagonist during combat. The traditional BDU used in the west is the green DPM jacket, helmet, trousers and boots.

## Chronograph - A device that measures projectile speed

Chronographs are used on most, if not all airsoft skirmish sites in order to check the speed at which the BB is shot from the gun. If the BB is travelling too fast, the gun will be considered unsafe for open play and its use will be disallowed.

Chronographs generally work by sensing breaks in the available light as a BB passes over two in-line sensors. The time taken for the BB to pass the first sensor and reach the second sensor is used to calculate the over all speed (Muzzle Velocity) of the BB.

## Callsigns

Codes that designate various elements for use in radio transmissions.

## Hi-Cap / High-Cap High Capacity (usually refers to airsoft magazines)

An ingenious mechanism powers hi-cap magazines. This mechanism allows a magazine that normally holds 50 shots to hold several hundred. There is usually a wheel that needs to be wound tight in order to keep upward feeding pressure on the BBs. Hi-Cap mags do allow you to load hundreds of shots in to your replica, but they can be problematic if not properly taken care of. See also "Lo-Cap" and "Mid-Cap".

## FPS - Feet Per Second (a measure of velocity)

The speed of BBs during flight is often measured in feet per second. This speed is measured to obtain the energy output of the gun before most skirmishes. In the UK, you cannot generally skirmish with an airsoft gun that exceeds 328fps with 0.20g BBs (1 Joule of energy).

## GBB - Gas Blow-Back

The gas blow back mechanism powers many airsoft pistols. The BB is launched from the gun using an expanding gas stored in a reservoir, while the same gas reloads the gun ready for the next shot. In most semi-automatic pistols, this mechanism provides a very realistic look and feel to the gun, without being too fragile or problematic.

## HOP-UP (HOP)

A device installed in most airsoft guns to increase range. The HOP unit is present in most airsoft replicas. A small piece of rubber is pushed inside the back end of the barrel through a hole in the top. When the gun is fired, the rubber grips the top surface of the BB, putting back-spin on it. As the BB leaves the barrel, the spin creates an imbalance in the aerodynamics of the projectile. The top surface has less drag, but the lower surface has greater drag, causing the BB to stay in the air longer and travel a noticeably farther distance. In real terms, this device can more than double the effective range of a gun, even though the projectile is actually moving more slowly through the air.

## Goggles Down

Term used by marshalls to indicate the start of a game.





# ON CROSSFIRE:

## My First Encounter

by Barbette G. Atienza

**W**hen I saw the movie S.W.A.T. my secret dream to become a part of the military was funneled anew. Of course, the sight of Colin Farrell was a factor but it was the arresting presence of Michelle Rodriguez that really struck me - the babe in uniform.

Smart and wit stitched in the right places; stroking and firing a gun with the finesse of a courtesan; being in a brat-pack of handsome comrades; making that swagger-stride with the right touch of sexiness - she was almost one of the boys. Almost, but not quite.

When I received a call from Airsoft Xtreme's editor asking me if I have any reservations in playing a sport usually associated with the masculine gender, a resounding no was my immediate reply.

After all, most of the sports I played have always been stereotyped as 'for the boys' --- soccer, marathon, futsal, three-on-three basketball, amateur boxing, ultimate. I have played these sports with a passion that rivals that of the opposite sex, and at some point with more verve and passion that guys would really put in.

Definitely, it is one game invitation I certainly would not want to miss.

### ACCEPTING THE CHALLENGE

I am going to spend one whole day playing 'war games' with a band of enthusiasts who have called themselves the 'weekend warriors' --- grown-up men who would shake off their collared shirts, polos and ties for a day-long activity that primarily boasts of shooting each other.

Meeting place was in a fast food joint in Philcoa. In my jeans, shirt and trainers, I thought I look like some college student on a wash day compared to the smart garb that the Airsoft Xtreme Team was wearing.

Mel and Benzi were wearing collared shirts and cargo pants, ditto with Joey (a.k.a. "Hurt"), Christian and Soulman. Their well-coordinated outfits reminded me of the pistol shooting team I once covered and interviewed.

For that particular Saturday, the game site was in Cavite. The ride was smooth and the company engaging. I thought one has got to be an airsoft freak to fit in. But the group

proved otherwise.

There I was bunched together with my lady editor Melody in the middle of the friendliest, wacky and cool group of guys I have been sent to do coverage with. Jokes came in a steady stream, with a couple of wisecracks provoking an eruption of laughs and guffaws every now and then.

Snippets of airsoft info would pepper our conversations - such as the number of enthusiasts one team could have. The guys intimated that some teams are composed of 30 to 50 members, while some groups boasts of more; that the game of airsoft is not limited to Luzon area as aficionados are scattered over at the Visayas and Mindanao area and are actively engaged in their respective regular games.

### THE GAMESITE

Finally, we arrived at the game site --- a 20-hectare land that sits on Molino III in Bacoor, Cavite.

One would not guess that an airsoft site idly lies beyond the smooth stretch of asphalted highway as the land is well covered by a



one-story building that serves as the mayor's office and is smartly camouflaged by well-grown trees.

The site is being maintained by the Samahang Wargames Astig ng Kavite, popularly known by its acronym S.W.A.K. Members of this team convene every weekend to engage in "friendly battles" or show off the recent modification made in their guns or the latest addition to their personal armory. Some members bring their kids to the site, so it would come off as little surprise if their juniors are included in their war games as well.

S.W.A.K. led by its president Larry Nato - Imus' District 2 councilor and Jayson Atienza - the team's vice president welcomed Airsoft Xtreme to its headquarters (that's HQ for all of the uninitiated in the military jargon).

Introductions were easily made and soon everyone was absorbed with the games to be played for the day.

Being a newbie - to the sport and to S.W.A.K.'s enviable HQ, we were given the basic DOs and DON'Ts. But aside from the basic rules being implemented in every game, here are the things every greenhorn to the sport should take into consideration - this base on observation and more importantly experience.

Do... wear something comfortable - both in shoes and clothing. Wear something that would allow you to maximize nimble or quick movement. Most often than not, players engaged in a 'situation' are provoked to go for a sprint, jog, run or roll over.

DO NOT.....- wear bright colors such as red, yellow, pink when playing in a jungle terrain. It's a 100 percent invitation for bullets to rain on you. Bright colors contrast sharply to the lush green foliage, therefore making you easy to find and an immediate target. This also applies to game sites that may offer ruined building structures or flatlands as 'battle grounds'.

So, just imagine my embarrassment when I pulled off my goalie shirt which was in fire-engine red. My intention to protect my arms from cuts was overridden with the fact that I would not last enough to nick a scratch. Harhar.

(But then again, I proved them wrong as I lasted enough in my screaming bright-colored garb undetected. It was my gun who did not lived up to the task.)

These are just simple tips, but once you have decided to engage in the sport, the practical application comes off spontaneously.

### BULLDOG'S TOUR

One of S.W.A.K.'s affable members whose call sign is "Bulldog" was tasked to give us a brief tour of the site.

(Suddenly, I envisioned myself being part of Mel Gibson's flank in We Were Soldiers. I smiled at myself and tried to listen more to Bulldog as he points out the sights and sites we could anticipate once the games have started.)

The rain of the previous night left the earth moist and at some parts of the mushy enough for us to pick up that dampy, foresty

Getting the feel of the place was exhilarating. I was already gushing about the place when we went back to the pit, silently I know, the tour is only half of the airsoft encounter I am about to experience.

### LET THE GAMES BEGIN

Chris was kind enough to lend me his gloves and hat. Hurt offered me his protective vest and even showed me how to properly strap the velcros - though, I must admit. I must have looked weird wearing my long-sleeved soccer shirt under it.

Jack provided me with the gun, turning over his 'Jolina' informing me as well that it is loaded. Benzi showed me how to properly re-load the magazine, scratch its belly in a tickling manner to re-funnel the pellets from one chamber to another --- and with everything set, I was ready to do the airsoft rock n' roll!

But before the battle began we feasted on the hearty lunch prepared by S.W.A.K. --- spicy



scent. Just imagine Bruce Willis a.k.a Lt. Walters in that ...film "Tears of the Sun" and perhaps you would get an idea of what I am talking about.

The site easily spells jungle terrain - towering trees and thick shrubs provide the perfect cover-up. Patches of grass provide enough cushions for players when executing an assault. But players are also wary of the twigs and cogon grass that litters the place as a single cracking sound from these dried branches are enough giveaway especially when the games have started and the 20-hectare site would be suddenly covered with silence.

Bulldog's tour lasted roughly about 30 minutes.

tahong, tasty beef viand, roasted chicken and of course hot, white rice! In between spoonfuls, easy banter and jokes were traded. I could hardly keep the butterflies in my stomach still, so I gamely joined in their friendly verbal melee. Somehow, my excitement was lidded - at least until the meal was over.

After washing down the delicious lunch with ice-cold water, deliberations followed. We were to go using the buddy system. The 'weak' ones were paired with the 'skilled' players. This was so to balance the team's strength and even the battlefield.

At the sound of the siren, the games began!



I was buddied with Seko – a tall dude who thankfully didn't mind being paired with a nervous newbie. Well, I must have looked composed enough that less than two minutes into the game he was confident to leave me in our post and nimbly made his advance. I know, he must be screening me.

So, there I was crouched low firing off my gun once in a while to cover Seko's movement. Getting restless in my post, I have decided to transfer to the next tree. Two of our enemies emerged from the trees hands and ammo over their heads shouting hit, now this is cool, I thought.

Scanning laterally, I saw member of my party advancing. I moved closer towards them. I was excited to unleash a rain of bullets, but when I pulled the trigger nothing came out. I shook my gun and the pellets made a soft jostling sound. I pulled the trigger again. And again. Seeing Joey and Mel a few meters

when Benzi lauded how I survived my game unhurt and in the middle of the line of fire with toting a gun running on an empty battery. Ha ha! Now, that's for kicks.

The boys egged that I should join the second wave of the games. Benzi offered me one of his guns. "Nakakagigil 'yung hindi ka natapos dahil naubusan ka ng battery, tapos hindi ka naman hit. Laro ka pa," he wheedled. And like a kid receiving a gift on Christmas Day, I happily took his gun and excitedly run over its features. The guys took turns in teaching me how to reload and change the magazine. This time, make sure that I have enough ammo.

The second wave of the games started. This time, Beach (or was it Bitch) is my buddy. "Mam, ano po ang call sign ninyo?" he asked. Caught off-guard, I blurted the first word that popped into my head – "Nemo."

take a peek, two pellets hit me at the head. One would have ticked my eye and the other my cheek. Thanks to my head gear and face mask, there were no bruises to worry about.

Therefore it is very important to check on your head gears before plunging into action. You would never know the gravity of the pellets impact, actually, you would never want to know how much it hurts. Also, never remove your mask and gears until you have safely reached the neutral zone --- the pit. You could never anticipate which bullets from the ongoing shootings will hit you.

### HAPPY TRIGGER

Plopping myself down at the pit, I happily stripped off my gears. I am done. I am happy. I am contented. I am satisfied. Getting initiated to play airsoft ranks as one of the coolest challenges I have done. Scanning the faces around me, I see lots of smiles and happy faces looking back – and I could only happily drink it in.

I know, my body will ache in the 'morrow with all the duckwalks I have made to avoid detection, the sprint-runs, the lying-on-my-belly and low crouch stances I have made. But all these anticipated post-game effects will never fail to dampen my zest to indulge for another round of 'airsoft'.

What's that word again? Oh, addictive.

away, I motioned them my dilemma. The guys came over to my spot and checked my ammo, their diagnosis --- "Your battery's empty!"

Moral of the story: Always charge your gun when anticipating a game. I swear, I must have been the happiest-looking player who shouted "HIT!"

The guys at the pit thought I was really hit. But after telling my story, I know their trying to keep the hilarity light.

When the time for the first game lapsed, every one trooped back to the HQ. I must admit, I felt a bit accomplished especially

I laughed, and my buddy smiled, repeating what I have just said – "Okay Nemo, let's go".

Roles were switched. This time, I go with the defensive team. We were given a few minutes allowance to establish our position.

We have decided to go down the Bravo region where the dry stream cuts through. Beach positioned himself on the flat of a small cliff. I took the spot directly across him, behind a thicket of bamboos. Jack was right behind me, concealed by a thick shrub.

Soon, bullets were wheezing and sneezing past us. Just when I thought it was safe to

Yes. That best describes the sensation that airsoft leaves on newbies like me. One could only get enough to tide them over to the next game, to the next battle, to the next 'weekend war'.

So tell me, when will our next 'airsoft game' be? ●

**(EDITOR's NOTE:** *Barbs is a sportswriter and a columnist for 5 years until she joined GMA Network as the Acting Regional Publicity Specialist. Though she's busy with her schedule, she always finds time for her passion -- writing).*





# AIRSOFT LEGALIZATION



**A**IRSOFT gun enthusiasts have, for some time now, cocked and loaded their campaign to have their weapons of leisure legalized. Although not quite a Herculean task, the game shooters are aware that they are pointing their cause at formidable targets – the law and the Philippine National Police.

Just like a wargame, the hobbyists have long been locked in mock combat with the PNP regarding the classification of their 'toys'.

In an interview with AX, Cong. Ruffy Biazon explains the problem simply.

"Under PNP regulations, cal. 22 and above are considered firearms. And under the law, pag meron kang firearm, kailangan meron kang necessary permits. So based on that PNP regulation which is also based on another law, it is considered a firearm. You could be charged with illegal possession. I believe that the police are strictly enforcing that. It just happens that airsoft is 6 mm. Those considered as firearms are 5.5 mm. and above so pasok ang airsoft," Biazon says.

Letter of Instruction No. 1264 specifically bans the importation, manufacture, distribution, sale and display of firearm replicas.

Included in the ban are "imported toy firearms and explosives which, except for







its weight are replicas in appearance, measurements, color and parts as its genuine counterpart firearms and explosives. By leaving out mere possession, the law in effect empowers the PNP to seize such guns within play view or used for illegal and criminal purposes.

The PNP chief has been given the authority to formulate the criteria which would provide for the identification of an air rifle/pistol whether it is a firearm or a toy. Such mandate is anchored on the provisions of Executive Order No. 712, dated July 28, 1981.

Section 1 of EO 712 states that: "The Chief, PNP, shall prescribe the criteria for determining whether an air rifle/pistol is to be considered a firearm or a toy within the contemplation of Sec. 877 of the Revised Administrative Code.

The prevailing situation has left airsoft gun hobbyists worried. Although reports of firearm replicas being cancelled could be considered negligible, the threat of a crack-down hovers like the sword of Damocles over their heads.

With the wargaming industry becoming more popular, enthusiasts say the possibility of airsofters crossing paths with the police wouldn't be rare anymore. Such instances could create more tension as authorities would be further concerned about the proliferation of the 'toy' guns which

could be used by criminals.

Thus, airsoft hobbyists feel the urgency for their wargame toys to be legalized, which they believe could be achieved through the repeal of the LOI by legislation and the support of the PNP.

"I felt that there's no real organized effort to go into legalization. I believe that what we have been doing lately is just a start. So far, I haven't heard of strong anti-gun legislation. Passive mostly. In the Senate, Senators Ramon Magsaysay and Miriam Santiago filed a bill. Practically the same as LOI turned into a Republic Act," says Biazon.

The congressman, however, feels that legislation for the legalization of airsoft guns should be done with the right approach and has to be done gently at the right time. "Now that we have a heightened issue on terrorism, therefore it's not yet the right time. Because somehow, people will find ways to connect it," he quips.

For his part, Biazon reveals that he drafted a bill that aims to amend all other laws regarding firearms replicas, and not just specifically zero in on the bullseye-- which is the LOI.

"Legislation is an art of compromise. We should respect the rights of the authorities. In the draft bill, instead of prohibiting the PNP, it shall promulgate the necessary

rules and regulations of the manufacture, sale and distribution of the firearm replicas.

Someone said it's vague. The reason behind its vagueness is that it is already a movement from prohibition to regulation. It's already a one step forward. It is much better for the PNP to do the drafting.

If a bill will be prescribing details of the rules and regulations, it will be subject to intense scrutiny from other lawmakers, specially those who know nothing about Airsoft. All the 366 solons will have their opinion.

The advantage of the provision of regulation, ang mag uusap na lang 'yung stakeholders and the PNP. They could compromise because there's already an existing rules and regulations. If the PNP shall promulgate the rules and regulations, they will just have to adopt the existing ones," Biazon says.

The congressman believes that the country could replicate Canada's which considers those 500 fps as firearms, practically leaving out airsoft guns.

"Below 500 fps, there's no need to register. Meaning, practically Airsoft is allowed. We adopted it, so when we present the bill, we could say that this is being used in other countries," he says.

Biazon also suggests that aside from



“Airsoft falls under the category of toy guns, and there’s still a ban on replica guns, therefore it is still prohibited until we have fine tuned the details on the Implementing Rules and Regulations”.

- Col. Estilles



used in committing a crime. But if we can prove that it is widely played and there’s no incident reported that used airsoft guns for illegal purposes, therefore there is no basis for unrest,” he says.

“I requested an official position from PNP about the possibility of legislation and legalizing airsoft guns together with the statistics of incidents of replica guns used in crimes for the past 10 years. If it appears very minimal inspite of the fact na 'yung growth ng hobby ay exponential, then there’s nothing to worry about. In effect, there will only be a repeal of LO1 1264, but with a very subtle approach”.

He stresses though, that local governments could boost the legalization drive by cooperating with the PNP. This way the tendency of the police to abuse their power to confiscate would be minimized, if not prevented.

#### The PNP

When AX asked PNP for comment on the issue of Airsoft legalization, Deputy Director Gen. Avelino Razon categorically said it is up for the PNP’s Firearms and Explosives Division to come up with a proposal which would be amenable to the hobbyists and the authorities.

For his part, FED Chief Gen. Arturo Cacdac stressed that the PNP has an official classification to follow. “It’s not a matter of having a personal stand. It’s an official duty to implement the law. We are trying to help the enthusiasts legalize their replica guns by having these registered,” Cacdac says.

Meanwhile, FED Deputy Atty. Napoleon Romero Estilles said his department has already submitted a proposal to the office of new PNP Chief Director General Oscar Calderon for approval. Estilles said the proposal targets on one-time registration of airsoft guns. “Dealers of guns must also apply for dealership, possession and license. If found unregistered, the airsoft guns can be confiscated,” he said.

He stresses that even if the PNP would have intentions to help the enthusiasts, the police would still have to implement the law.

“If you would look at PD 1866 and RA 8294, pasok talaga ang airsoft guns sa definition of firearms. We even gave them a leeway by imposing a one time registration only. Our intention is to help the airsoft gun enthusiasts. Yet, the LOI will still apply. I believe it would be detrimental to the hobbyists if there would be no law to enforce regarding the airsoft guns. It will work for both sides if there’s still is a regulation,” Estilles said.

Until now the PNP have not release the details of the new IRR. As per our last conversation with Col. Estilles, nothing is final yet. But he guaranteed though that it will come out in a few weeks time.

legislation, there is a need to regulate the players themselves. He also cites the need to be coordinated with and not antagonize the police, who are implementing the law. Amid the persisting threat of confiscation, he urges the need for enthusiasts to know their rights in the event a confrontation with the law arise.

Biazon added that, “It is also very important for Airsofter to know what they can do to project to the public that they are responsible. And that this is just one of the sports being played in all parts of the country. That there are organized teams competing in an existing gamesites. This way it will help demolish the drive and the arguments against this activity. The simple argument is the thought that it could be





## Tokyo Marui M14 Wood Style Stock

The full size M14 comes with a one piece outer barrel and 14mm screwed flash hider, solid constructed body, and a stock that holds a large 8.4v battery. This rifle uses Marui's new Version 7 gearbox that will generate approximately 280fps of power. The M14 shoots in semi and full auto mode. Comes with a 70 round standard magazine. The adjustable hop-up is revealed by pulling back on charging handle. Windage and range adjustable rear sight. This is an extremely solid AEG with abundant metal parts, it weighs in at almost 9Lbs! The imitation wood stock looks very real.

FPS: 325FPS

Average Range: 100-120 Feet

Accuracy: Very!

Weight: 12lbs (12-13 with RDS)

Gears by TACTICAL OPTION  
Gun provided by AIRSOFT PHILIPPINES



## Tokyo Marui M16 VN

This is a Vietnam era version of the modern and very popular M16 VN. You can't beat the look of this gun which was the work horse of America's fighting men. The extra long barrel gives it great accuracy. It takes all the popular upgrades available for the more modern versions.

### Specs:

- Gear Box - Version 2 Motor
- EG700 Magazine - 190 Rounds
- Length
- 992mm Length
- 3700g Muzzle Velocity
- 279.84FPS Accuracy - 224mm
- ( 20m ) Battery - Large Type (Not Included)

Gears by TACTICAL OPTION  
Gun provided by AIRSOFT PHILIPPINES

Airsoft Xtreme



55



# Classic Army M15 A4 CQB

The M15A4 C.Q.B. is an airsoft replication of the Colt M4 CQBR carbine. It is produced by Classic Army of Hong Kong and fires 6 mm ball bearings through a standard-calibre barrel (6.08 mm ).

Key features of the M15A4 C.Q.B. are as follows: Metal body, Pre-upgraded internals, Replica gas tube, High-capacity magazine (hi-cap), crane stock, rail interface system (RIS).

The replica is powered by a custom large-type battery, held in the crane stock. Two types are available for the crane stock, the smaller of the two having a capacity of 2200 mAh and the larger having a capacity of 3300 mAh.

The M15A4 C.Q.B. is completely compatible with Tokyo Marui parts. The replica's average velocity in stock configuration is between 310 and 335 feet per second (94 and 102 m/s). The replica's cyclic-rate on a 9.6 V battery, in stock configuration, is approx. 1200+

The gun is equipped with aimpoint scope red dot.

Gun Courtesy of Wmaxell Inc.





Gun provided by WMAXELL Inc.

AirsoftXtreme



57





# P90

The P90 Triple Rail Silencer rifle is one of the most realistic and accurate guns of its line. It is a replica of the real FN P90 submachine gun designed in the 1980's for NATO. The unique design of the gun provides max comfort, as the stock contours to your hand perfectly. It is also small and compact, a useful trait in all skirmishes. The realistic weight is also a great

feature.

Metal parts include the barrel, fire selector switch, and rail. Although made mostly out of plastic, this gun weights more than expected and is perfectly balanced, with the engine in the back, gearbox in the center, and metal receiver in the front. This airsoft rifle is both single fire and fully automatic.

Length: 504mm (19.8 inches)

Weight: 2.1 kg (4.63 lbs)

Magazine capacity: 68 rounds

Motor: EG1000

Caliber: 6mm

Velocity: 280 ft/sec

Gun courtesy of Airsoft Armory



## WA m92F BladeMaster III

The WA m92F BladeMaster III is a Gas BlowBack Guns not only look and feel like their real firearm counterparts but also behave like them. When a real gun is fired the top slide recoils and ejects the spent cartridge. Gas Blowback guns, powered by HFC134a gas, fire in Semi-automatic mode, and also use a small amount of additional gas to recoil the top slide like a real gun. These AirSoft models look and behave so authentically that they have been widely used by movie makers.

Length:250mm Out of stock

Weight:1100g

Magazine:25rds

Shooting Mode:Semi

Power Source:HFC134a

Power:230fps

Hop-Up:Adjustable

Gas Blowback

Gun courtesy of Airsoft Warehouse

AirsoftXtreme



59





# CAMP MADAWIG UNVEILED

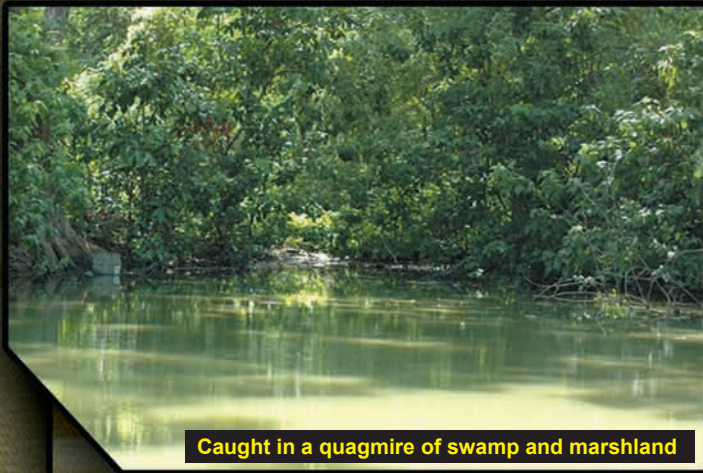
Located just a few kilometers or about an hour drive from Manila is Camp Madawig- a 20-hectare land that sits on Molino III in Bacoor, Cavite. It lies unnoticed behind the one story building of the Mayor's Office.

This game site is Team SWAK's closely guarded secret. It is often referred to as the Predator's lair because of the similarity of its jungle terrain used in the movie "The Predator".

Camp Madawig is the best game site we ever visited. So far the most challenging one because of its difficult trails. Indeed it is an airsofter's dream site come true.







Caught in a quagmire of swamp and marshland



Behind one of the many grassy knolls



Where snipers are often mistaken for a will o' the wisp





# DOUBLE EAGLE M50-A

by Roland Castro

## SPECIFICATIONS:

Gun type: bolt action  
Velocity: 105 m/s at .12gram Bb's  
Range: 70 meters  
Weight: 2200 g  
Overall length: 1080 mm  
Barrel: Smooth bore 449mm  
aluminum barrel  
Magazine capacity: 25 Bb's  
Hop up: adjustable

## What's in the box?

The rifle itself, bb loader, 3 piece butt pads, goggles, manual and diagram, cleaning rod, pack of bb's and pack of screws, sling and tools. Keep in mind, the M50-A is a strip down version of M50-P, which has a red dot and LAM. The box clearly says that the bipod is not included.

My first impression of the gun was that it was a Maruzen APS2 clone. The design and stock is similar and there are other internal similarities as well.

The body is made of a hard plastic that makes it reliably strong, not ABS plastic though but is durable. The manufacturer used a standard plastic like- DE m47 shotgun and not the fiber like- APS2 stock, making it a bit lighter. A piece of metal weight is placed inside the stock to balance the heaviness of the rifle. A checkered grip on the stock helps you keep a good grip on the gun.

The outer barrel is made of a thick aluminum and so with the inner barrel, which has approximately 6.10mm inner diameter. Barrel tip is made of plastic with threaded end. The thread gives gun modders an option to make DIY suppressor, a more silent rifle.

On top of the gun is a 7 inches Metal Picatinny Mounting Rail System for scope and weaver rails for bipod.

The bolt and safety. There are similarities with the APS2 here. It is smooth and easy to cock. The cylinder inside cannot be opened, but it appears it can be replaced with APS2 cylinders. This means you could possibly upgrade your gun with aftermarket parts. No confirmed report of possible upgrades of it yet. But I have made some modification using locally available materials.



Accessories



Stock



Outer Barrel



Picatinny Rail



Bolt Handle





Magazine



Cylinder Head



Cylinder



Hop-up



Hop-up assembly removed from the outer barrel



Hop-up assembly disassembled

This plastic-made magazine is similar with the VSR10 magazine, but a little shorter. It holds 25 rounds.

The stock is adjustable with the inclusion of the three butt pads. While the default length of pull may be fine for most people, it can be increased for those with longer arms. It also adds a little more weight for balanced aiming.

The head and rear portion of the cylinder is fixed onto the main cylinder by three brass pegs. It is different though for the M50-P as the cylinder head is attached to the cylinder by 4 rectangular holes.

There appears to be no simple way to disassemble and reassemble the cylinder. Nevertheless, Filipino ingenuity always finds a way in upgrading the seemed impossible.

The trigger assembly is made of metal and is housed in a plastic. Seems zinc material, as suggested by some of the gunsmiths. My impression on this is, it may handle a 500 fps load.

Hop up assembly is made of mostly metal and some plastic. It is generally better than the ones you find amongst EAG's because it has grooved slide that helps the hop lever stay in position.

Hop up settings are crucial for the right, if not perfect, aiming. The hop bucking, though, is of V-type construct, which in my opinion produces lesser accuracy. The bucking is fitted onto a plastic tubing and onto the inner barrel. This is where air leak usually occurs.

The stock velocity is 320-400 fps with .20gram bb's depending on how good the compression will be. The M50, in review, reached 365 fps using chrony gama (care of Mr. Parks). Performance wise, the gun performs at par with other bolt action rifles in the market. With its stock velocity reaching 400 fps, if it is properly optimized and compression leaks repaired, it gives an acceptable performance for a newbie sniper.

Accuracy also comes in question when getting a sniper rifle. The stock aluminum barrel is fairly accurate in fifteen to twenty five meters with .20 gram Bb's farther than that, you start praying.

Making this rifle effective in fifty to one hundred meters will require upgrades, and a very expensive one. You'll need to think and rethink before getting those available aftermarket upgrades. It should cost you ten times your gun's worth. And it is not proven yet if it will be a drop in fit.

Nevertheless, There are available DIY upgrades the ACM way.

Over all, the Double Eagle M50 sniper rifle is a good for starters. It comes in a very affordable price. With proper care and use, it will go a long way. With the upgrades, it will be even better. You'll just have to keep extra care once upgraded. After all, it's an ACM gun with a cheap price tag. And that means it was made with lesser quality in mind. ●





# Star Airsoft UMP

**FIRST IMPRESSION** The first time I held Star Airsoft UMP, it reminded me of the movie *The Matrix Revolution*® and the movie sequel *Bad Boys 2*. Impressed by its strikingly *angas* look and its slow rate of fire that denotes a heavy firepower, I wondered how much more *angas* can an AEG look like. I was so impressed by its size, comparing how it appears in the movies being held by actors with heavy build and standing more than six feet tall makes the UMP look like an MP5 PDW.

Nevertheless, UMP's overall size is seemingly a bit longer than the MP5 A4 and a bit shorter than the G36. Its front part is narrower than the G36 and weight is obviously lighter, if you are an MP5 series lover, the UMP may be a bit of disappointment for you with regards to length and weight.

The UMP's *angas* look may have been complemented by its humongous... or maybe just huge magazine. Long, straight and seemingly a relative of the classic .45 Thompson sub-machine gun, the magazine adds a character to the UMP of which the stand alone MP5 series is short of. The UMP's overall look is still eye-catching for me... I just wonder how it feels...



**THE GUN** After my impression on this AEG, I was excited to take it to the game site and do my first testing. Fortunately the weekend weather was good enough to cooperate and I was able to complete a whole day's game and literally finished off my bag of BB.

Big, huge or bulky as you can see it, the UMP is a muscle SMG in real life, but in the game site, it's a head turner for almost everyone who saw it for the first time. Still stock and out of the box, the UMP was tested to shoot at 272 feet per second using a .20g BB from Tokyo Marui.



I was skeptical at first with the hi-cap magazine, but to my surprise it never "misfeeds" at any occasion during the game, well of course when the mag went dry... How much more realistic can it get? a window on the side of the magazine so that you can see how much more bullets you have, unfortunately not the bb.

The weight of the UMP is the only downside I have experienced at the moment.. Running and crawling made it more difficult because of the long and huge .45 magazine in real life. Also, shooting at a prone position was very difficult because of the magazine.





### THE FRONT AND REAR SIGHTS

The front sight is a direct copy of the G36's ring sights which is very sturdy, although the UMP's front sight is made of plastic, you might want to upgrade it into a metal in the future. The rear sight is exactly of the same size and feature as that of the TM G36C, but again it is still made of plastic, I hope that there will be an aftermarket metal upgrade soon!!

**FOLDING STOCK** The folding stock is one of the most convenient features of the UMP. CQB or assault, this folding stock is so convenient that you can hold the AEG with one hand in a CQB game.

Convenience is my best judgement for the UMP's folding stock.



**GEARBOX** A single allen head bolt can detached the whole lower receiver and gives access to open-up the whole gearbox. Again similar to the Marui G36 system, the gearbox is much easier to operate now on the hands of an expert.



**THE BATTERY** Let's get a little expensive here! The battery I got was a KR-1500 NiCad by Sanyo, priced moderately. I decided to go for the 1500mah rather than the 1700mah which is always available in the market.

Mounting the battery is no hard work, slip it in, connect the terminals and voila!



**HOP-UP ASSEMBLY** A direct copy from Marui's G3 series and the G36C, UMP's hop-up adjustment is very precise with little increments. I like this hop-up design better than the MP5 and my previous M4 series. Due to the absence of a working or simulated cocking-lever, opening the simulated bolt door is not as easy as it may seem, a slippery or wet fingers will give you some difficulty keeping the door open.



Adjusting the hop-up took me quite awhile maybe because there was still some presence of silicone oil inside the hop packing which made adjustments erratic and difficult, but as soon as I fired up 460 rounds of .20g bb, the hop setting was at its constant trajectory. ●





# BOTH ELEPHANT'S STEYR AUG WITH METAL GEARBOX

by NIGHT STALKER

## First Impression

Both Elephant you said? BE na lang for short, or should I say BE *na lang kasi medyo funny yung brand*.

I was on the look-out for a reputable China made AEG and I was actually having second thought of getting one. I've heard of WELL, BE and CYMA but never held anyone of them. So I took the courage to ask my fellow airsofters of a good ACM brand of AEG, well I never got a reply.

After playing again for sometime, I've seen the BE and WELL brands of AEG and it has resemblance with my TMs from a far... and it could be mistaken as a dressed-up BE Steyr AUG. hehehe...

So, that's why I became interested with the BE Steyr AUG and this review is what it is all about.

Honestly? At first, I was very apprehensive, until I saw what is inside the box. Then I realized that "hey this isn't bad at all!" Battery pack, charger, hi-cap magazine and a cleaning rod? Heck this beats the TM when you say "ready to rock". And not to mention the protective eye wear that was included as well. It's an all in one package, charge up and ready to fight!

Overall? I can say that, yes this is worth the gun you pay for... If you are the type who is really budget conscious and is just

after the heck of it and not entirely serious about Airsoft, these ACM brands are worth trying and just choose which model is your best choice.... but don't you compare it to TM or CA or the other high-end brands, this AEG is in a class of it's own, and a little higher maybe.

The all-black color of the Steyr AUG



Military version was a bit gloomy for me, and the entire finish of the AEG was glossy in some areas... uhhmm maybe a little paint job and creativity will be required. So I decided to paint it all green and soon in an Auscam pattern.

## The Ver.3 Metal Gearbox

This was the very first thing I wanted to see on this AEG... version 3 like TM's? whoa!!! a direct clone. or copy? hmmm...

Yes I opened it, and I was so impressed

with how similar and how sturdy the gearbox was, watch-out TM! (I just realized why Japan and other toy manufacturers in Japan does not join TOY FAIRS outside their country, Intellectual Property Rights.) Anyway, I immediately changed to metal bushings; you will have to do somereaming on the bushing hole to fit your new bushings. The replacement took me half

hour before fitting the new 6mm metal bushings because the bushing holes were too tight for the new one. again take extra caution on this part.

The gears looked better; I guess these gears can take a little more beating than TM's stockers. They're all metal or steel by the way.

The piston body, cylinder head and the other internal plastic parts of the BE AUG is made of a respectable sturdy plastic



mixture. It seems strong enough to use an M120.... I assume...

Generally this is an easy to open type of gearbox, since I had experience opening my previous TM G36. and I found this to be very similar with TM's.

### The Steyr AUG's Construction

Hhhmmm..... It's too glossy...but I can say that the detail is good... I was impressed with the craftsmanship; I hardly saw a crease mark or joint marks that is typical with the low-end products. a little more technical advise with BE and this thing could be there already... a little step forward from being a clone TM. hehehe...

The way the plastic was made is quite thin which make the whole of it a little fragile... specially the front barrel assembly. Just watch out when you turn and don't hit the wall, or else you'll have the first 2-piece Steyr Aug. hehehehehe...

Once you disassemble the whole AEG, that's the only way you can access the metal gearbox.. I have read some threads claiming that they can modify the rear end part by cutting off a few plastic parts and then you can quickly remove the whole gearbox through the end where the battery is placed... I was skeptical and didn't try it, I reckon it will cause double-feeding...

The mechanical construction of the AEG is quite simple. that I realized after opening the whole thing... and un-screw everything was a breeze. it was about 9 to 15 pieces of screws and voila! it's all dismantled and ready for your worldly modification intentions...

### Custom Cut Commando 350mm Barrel

This is the part I like most... the only tool needed here is a hacksaw. and even the oldest and rustiest hacksaw will do the job.

I opted for the 350mm barrel, Commando Since I play CQB most of the times; I thought that this was my best option and the looks I really like.

I disassembled the whole barrel assembly by sliding down the lock and twisting the front grip counter-clockwise and pull the barrel out of the receiver and there you go...

Disassemble everything by first pushing 2 stainless pins that locks the front external and rear external outer barrels to the barrel receiver. Now you may cut-down to the length you prefer.

### The Hi-cap Magazine

This thing works well.... well enough that it never misfeed... Really, no mis-feeds. I can't say anything bad. but it's good. just plain good. This thing looks almost like a TM

made hi-cap, well yes except for the white "scratch-gear" that winds the mechanical gears and spring that load-up your bb.

Now I am wondering, will this mag fit the TM Steyr? and will the TM Steyr hi-cap fit my BE Steyr? Hhhmm... they look identical...

### Inner Barrel and hop Assembly

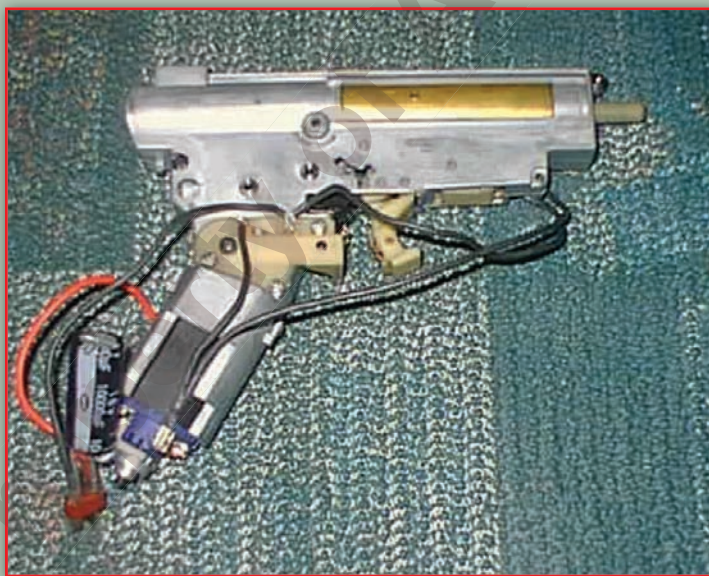
The inner barrel was my first modification project on this AEG, as well as the fixed hop-up system..

Honestly!! I hated the stock barrel, it was made of aluminum and the internal diameter must 6.50mm?? Oh my God!

### The Scope

The upper receiver was copied from the real Steyr Aug military, this replica seem so authentic from a distance... just from a distance, but yes the finish product is very "nice" and it seems real when painted or detailed by a master painter

My only comment on the scope is that, it doesn't work at all! .... if anyone can stick a working red dot inside? Ill feature your work here but hey at least it worked when I aimed for the target and yes it was a hit!! so I guess the red-dot is no longer needed for the tight budgeted player... just aim, center the target and rain away with bb!! ●





# Metal Based Cylinder Head Modification

by Roland Castro

**E**ver wanted to have an AEG that fires so loud and intimidating? Ever since I had my hands on an mp5 AEG, I always wanted to make my shots sound stronger and powerful. This is to add up as an advantage on any game tactics in a CQB scenario. My goal in gun modification is

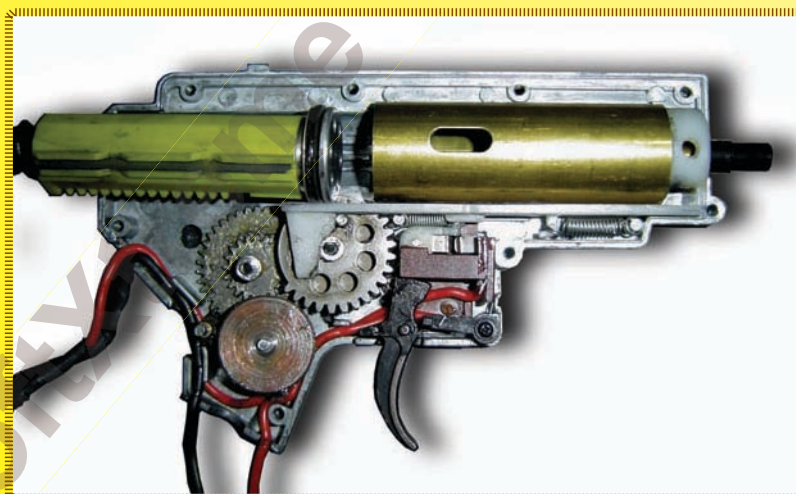
to apply possible modifications and practical approach.

So when I was one time studying the bits and pieces of my gearbox, I came across this idea that may work as long as it is being applied correctly. The modification is simple; you can do it in less than thirty minutes.

1



All you need is a metal spacer paired with a metal piston head. You will need both elements to make this project work. (A metal to metal collision produces a more powerful and metallic sound.)



2



METAL SPACER

Get a metal spacer with almost the same, but a bit smaller in diameter as the cylinder head. Remove the black rubber on the cylinder head and scrape the excess plastic lip protruding on the side of the head. Attached the prepared washer with glue and let it dry.

3



Now you have that metal based cylinder head that will cause the metallic sound you want on your gun.



# P90 MODIFICATION

By Roland Castro



**W**ith its awesome and intimidating look, this TM P90 became one of my favorite replica guns. Though compact, it can handle considerable upgrades.

I started this project a few months back. With a Well D-90 low powered AEG and a BE ver-3 plastic gearbox from a Steyr AUG just lying around my working area. I had this idea of a “transplant”, moving the more reliable ver-3 gearbox inside the D90, then add some Steyr AUG external parts and make this gun a battle worthy CQB weapon for any ACM games.



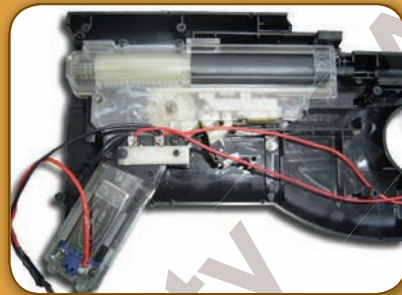




**1** First thing I did was crack open the D90 shell and remove all its internal parts, leaving only the shell and the trigger assembly. Then I positioned the gearbox, measure and eliminate the parts that need to be cut. Then add some acrylic sheets that will hold the gearbox.



**2** Use glue when you attached the two acrylic sheets on top and bottom part of the front cylinder. This is to keep the gearbox in place and more stable during the game.



**3** Notice the gearbox sticking out? Try to remove or cut the lower part.

I then soldered the wires from D90's trigger switch to the gearbox's switch assembly. You will notice the motor is protruded at the D90's butt. But there's a simple solution or modification for this, which I will show later.



**4** Next thing to do is to fit a TM brass barrel into the D90's hop-up. The TM barrel is about .02 mm thicker than the stock aluminum well. So I made some outer barrel adjustment by sanding the barrel end in a circular manner.



**5** Brass barrel and the AUG gearbox already in place.



**6** Now, the solution to the protruding motor at the butt.

Fitting this inside a very limited space seems impossible. But the only solution here is to squeeze it in and make the necessary adjustments inside the gun until it fits in.



**7** So this is what I did... I used the Steyr AUG's butt stock and some acrylic sheets to add more space for the gearbox motor.



**8** The Well D90 finished product. It's a fusion of Steyr AUG and P90. Now I named this baby... AUG-90.

## AUG is an acronym for Armee Universal Gewehr

In English it means "Universal Army Rifle" - a modern bullpup rifle made by Steyr of Austria and used by the military forces of several countries.

### Butt

The butt of a gun can be two different things depending on the gun you are using.

1. Pistol: The butt is the base of the pistol-grip, where the magazine is inserted.

2. Rifle: The butt is the rear-most point on the gun. If the rifle has a stock, the butt is the rubber piece on the back end that presses up against your shoulder. If there is no stock, the butt is simply the rear-most point on the gun.





# Spring Performance Guide Chart

Systema	21CA	Guarder	PDI	China	Theoretical				Fast				Torque Up		Bore UP	
					FPS .2g bb	Joules	Battery	Gearbox	Gears	Bearing	Bushing	Gears	Gears	Gears	Cylinder	Cylinder
M90	295	SP90	100%		294.3	0.81	8.4 v	Stock	Stock	Yes	Yes	Option	Option	No	No	No
M100	330	SP100	120%	china X-120	327	1	8.4 v	Stock	Stock	Yes	Yes	Option	Option	No	No	No
N/A	360	SP110	150%		359.7	1.21	8.4 v	Stock	Stock	Yes	Yes	No	Option	No	No	No
M120	390	SP120	170%	PFI 240%	392.4	1.44	8.4 v	Stock	Re-Inforced	No	Yes	No	Option	No	No	No
M130	425	SP130	210%	PFI-300%	425.1	1.69	9.6 v	Re-Inforced	Re-Inforced	No	Yes	No	Suggested	Option	Option	Option
M140	455	SP140	240%	china M150	457.8	1.96	10.8 v	Re-Inforced	Re-Inforced	No	Yes	No	Suggested	Option	Option	Option
M150	490	SP150	270%		490.5	2.25	10.8 v	Re-Inforced	Re-Inforced	No	Yes	No	Suggested	Option	Option	Option
M160	520	SP160	300%		523.2	2.56	12 v	Re-Inforced	Re-Inforced	No	Yes	No	Suggested	Yes	Yes	Yes
	550	SP170			550.2	2.86	12 v	Re-Inforced	Re-Inforced	No	Yes	No	Suggested	Yes	Yes	Yes

Original Spring Selection Chart taken from Airsoft Guide, Modified by 21st Century Airsoft to include more manufacturers. Also added China made springs. Performance may vary from manufacturer to manufacturer to another.

## TIPS

To prolong spring lifespan:

- 1.always decompress the spring by decocking AEG after the game or before storage.
2. It's always a good idea to lubricate the spring, along with the spring guide and piston body, to lessen the friction on the spring.
3. Upgrading to piston head and spring guide with bearings also lessens the stress on the spring.



**U**pgraded AEG's need larger capacity batteries. But, you will need a bigger space for this. One thing I don't like with AEGs is an external battery with a dangling wire outside the gun. It's an eyesore seeing players with that gun setup.

Some may ask, how in god's name am I going to fit that big battery in there? I am not going to do that. What I will do is to make a new bigger anpeq case and just use some of the anpeq's parts to make it look like another real anpeq.



## Anpeq case for sub-c battery

**1** Things needed are: standard china anpeq case, pvc downspout tube, some acrylic sheets and loctite glue. Measure and cut the PVC pipe into its desired length.



Heat the pvc tube up and stretch/mold it using two poles clamped on a vice.

**2** Now, the tube's molded to shape; cut pieces of acrylic to cover both ends of the tube.



**3** Time to cannibalize and get some usefull parts of an old Anpeq case



**4** Start glueing the cut acrylic sheets and the optics piece together.



**5** Now that every bits been glued and screwed together, a mist of flat black to finish the job.

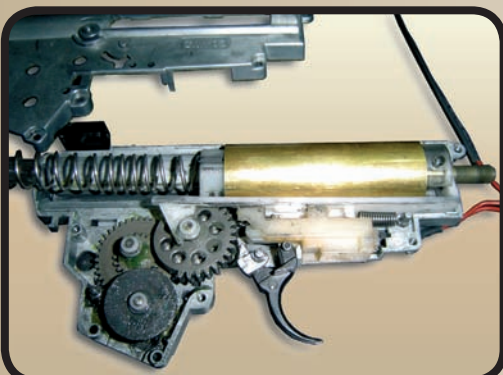
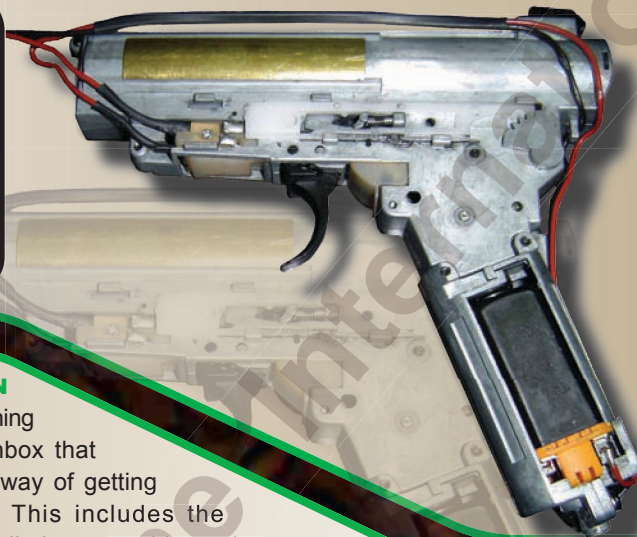
The final product, the finished anpeq case ready to house an 8.4v sub-c battery.





# AEG: SHIMMING

Before we start, I would recommend working on a clean, flat, and well-lit surface, so if any small parts get lost, they can be found easily. The tools necessary are: set of flathead and Phillips head screwdrivers, set of Torx wrenches (more specifically, a T10 driver), some Allen wrenches, lithium grease, and a pair of needle nose pliers. Depending on what you plan to do with the gearbox, different tools will most probably be necessary.



## PREPARATION

Remove everything from the Mechbox that will get in the way of getting to the gears. This includes the spring/piston/cylinder assembly, and etc. depending on the gear box. With this version of Mechboxes, the little safety lever needs to be removed.

This way, you can slide forward and off the selector plate. Now there should be only the trigger assembly left in place. When checking the shimming, do not install the anti-reversal latch, motor or anything else that may restrict the gears forward and backward movements.



## SHIMS AND BUSHINGS

There are three different sizes of shims you can use, with 0.5mm, 0.3mm, and 0.2mm thickness. There are two different diameters of shims, the small and the large. Of the two smaller diameter shims, they are noticeably different in thickness. They are the .2mm and .5mm thick shims. The large diameter shims are the .3mm thick ones.

Since your reading this guide, you are most likely replacing the bushings. If the replacements are solid metal they will be a tight fit. First, try pressuring them into place by pushing them really hard using your thumb. If it does not pop into place, Take something soft and tap it into place. Most commonly, you will end up lightly hammering them in using the plastic handle of a screw driver. Make sure to force the bushings into place **EVENLY!**



If you are replacing the stock bushings with bearing bushings, it will be a loose fit, and it is easier to put them on the gears than to try to make them stay in place on the gearbox. Don't worry about how unstable the bearings feel, it will be plenty beefy when the gearbox is together.



### SPUR GEAR

On the bottom (left) side of the gear, place a single .3mm shim. Put the gear into its place, and put the top (right) half of the gearbox on, and just hold them together tightly with your hands. Push the axle with a tooth pick or something similar, and note about how much it moves. Now it's just a matter of guessing and check with shims on the top (right) part of the spur gear. Once you think you have it just right, with little to no movement, put in three or four screws to make sure it is held tightly (more than your hand can do).

It should have very little or no movement side to side and you should be able to reach a finger in through the empty cylinder hole and freely spin the gear. If there are too many shims on the upper axle part, it will have resistance or be completely stuck. If there are too few shims, it will turn freely but have too much side to side movement.



### BEVEL GEAR

Start with the bottom (left) half of the gearbox including the shimmed spur gear. Place two .2mm shims on the bottom (left) part of the axle and put it in its place in the bottom (left) half of the gearbox.

Check for clearance between the teeth of the spur gear that mesh with the normal teeth of the bevel gear and the notched part that the anti reversal latch rides on. If they interfere with each other, then the bevel gear needs more shims on the bottom (left). If there is ample clearance (unlikely), you may want to drop it down to a single .3mm shim.

The idea here is: You do not want to compromise the gears' teeth because of the bevel gear having too many bottom (left) shims leading to minimal gear tooth surface contact between gears, but at the same time you don't want the anti-reversal latch contact area to be grinding with the spur gear.

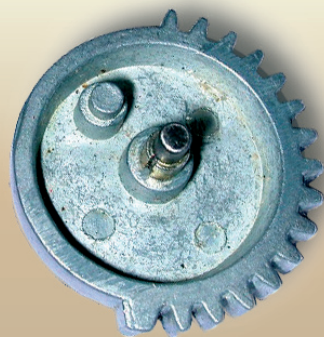
Cover the right side on and check for movement the same way you did for the spur gear. Then guess and check, put in a few screws and do the final spin check with the two gears. Re-adjust and re-test as needed.

### SECTOR GEAR

Almost exactly like the bevel gear, start with the bottom (left) half of the gearbox including the shimmed spur gear and bevel gear. Place one .2mm shim and one .5mm shim on the bottom (left) part of the axle. Check for clearance. This time you want to make sure the large diameter part of the spur gear is not going to be binding with the teeth on the sector gear that engage the spur gear on its smaller diameter part.

A general note about gear clearance: Remember that when the gearbox is together, the gears will not be able to twist (axels slightly off of parallel) relative to each other, so when checking the clearance, you may see interference that should not be there since you only have one half of the gearbox on.

Cheers!





# BATTERY CASE MODIFICATION

**O**ne way of hiding the battery is through a double mag.

You can use an empty AK47 magazine for this project. This can hold a 9.6v sub-C battery. This magazine came from an AK spetz low powered AEG. For easy modification, split the mag in half.



**1** The first thing to do is to strip off the battery's plastic wrap and place cells to see how it fits in the magazine.

In this picture, you can see that the batteries length and width is a perfect fit. But due to the battery's thick diameter, this will require more space before you can close the magazine. To resolve this, start grinding inner part of the mag until it is cleared of small obstacles.



**2**

Half of the mag. Finished and ready.



Both halves of the mags finished and ready to take in the sub-c batteries.



**3**

After the grinding. You can start with the soldering and rewiring of the battery.



**4**

The battery case magazine glued on to the hicap magazine. Use deans plug, for better conductivity.



**5**

Place another deans plug on the receiver then cover it with a hand made ready mag cover, made of acrylic sheets.



**6**

Ready mag cover with the deans plug in place.



**7**

The wire from the ready mag will be rerouted into the upper receiver. In case you need to charge the battery using the stock AEG plug.



**8**

The double mag fitted on a cyma AK47-s