**A Gunnery Discussion**  
*by the Members of the 352nd*

*This discussion was begun with a question posed by bhoot:*

I need some major help here..

Enroute to the engagement zone, alone, I encountered a lone gold fw 'bout 3K above me. I yanked around to put him (or her..many female wb players ??) on my nose. Pulled a nice vertical lead turn and shortly was on his 6. I withheld fire till within d3, fired in short bursts, attempted proper lead and alignments and blazed away. He pulled a nice series of e-retaining rolls and jinks but I stayed saddled up for maybe a full minute and shot my whole wad (p51-b). After half my ammo load, he seemed to realize my shooting sucked and just leveled out and let me follow him till I broke off in utter disgust. I ran for home (tail between legs)...

I've set for 225 boresite, primary and secondary guns both fired by trigger, and one of the gunsites from 'cudas page.

*DGoose:*

Couple of things bud..

1. The guns on the 51B. well out of respect for the plane I'll just say they suck!
2. Need to be inside of 250 to do any sort of damage from a tail end position.
3. The top two assume you were scorign hits not misses. If so its not your gunnery.
4. I am not the greatest shot but do fairly well.

*Rhino:*

Are you comfortable with your stick setup (i.e. pitch, yaw, roll dampening)? I've got a CH Jane's Combat Stick and its real touchy. I had to introduce some dampening in WB setup to keep from over steering. Even then, sometimes I find myself over controlling when I try to shot.

*Crashy:*

Two things I like to do in addition to making sure my lead is correct.

First, make sure I'm not slipping or skidding. If you slip or skid, bullets will travel left or right of your aim point. I use the 'yaw' tick above the gun sight for this.

Second, try to be pulling exactly 1 g. If you pull more than one g, your bullets path will be altered downward slightly. Either allow for that with more lead or get to 1 g. :) If you pull less than 1 g, shot path will alter up.

*BBGun:*
Biggest issue with gunnery is stick setup. And I don't just mean sliders in WB. I recently put in an ACM gamecard to replace my soundcard gameport, and MAN what a DIFFERENCE. Then I noticed I had a bad pot, so I replaced that and I am looking at a steadily increasing gunnery percentage. I hope I don't top out until somewhere in the teens, but I'll be happy if I stop between 10-12.

After the hardware issues, it's the sliders in WB, and your trim settings. If you were trimmed to 275 ias and were chasing him down at 340 ias, you were fighting your trim instead of aiming your shots. Make sure you use manual trim to keep your aircraft in, well, in "fighting trim", meaning keep it trimmed to near where you are flying at all times. I have my manual trim keys mapped to my throttle. For your sliders, try to keep the jumps between sliders less than 10%, my sliders start at 30 and go up in regular intervals (8?) till they reach 90 at the number 9 slider.

Thog:

"Gunnery is something that can be practiced with a handful of cashews and a cat."
-- Forgotten Warbirds founder

One major suggestion; don't fire in short bursts until you feel good about your gunnery. I know it's contrary to proper tactics, and I agree that short bursts are good once you've gotten to the point of semi-competence. But initially, you need the feedback of a stream of rounds and hit sparks to get a feel for gunnery. Short burst don't tell you which way your off. Walking your gunfire into something does. It'll waste ammo and not actually get as many kills (in the long run), but it'll help you learn.

Second suggestion; if at all possible, don't do an exactly dead-6 shot. This gives the other guy the narrowest possible profile. Try to hit him when he's at a slight turn to you, which he likely will be when he tries to jink. Then lead him more than you think you need to, depress the trigger, and let him fly through the bullet stream. With luck, you'll walk it back from cowling to tail, right over the cockpit, and kill him like the vermin he is.

Hygame:

I think Gunnery is something you just have to feel out. My gunnery was preatty bad when I first started WB's, but practice makes perfect :) when I used to actually fly more than a few hours a month, my gunnery was up around 25%. Just keep practicing in the MA and offline. Eventually it will click :)

YT:

ok here's my take on gunnery. one thing you'll find that bbgn, sd, eadg and i can attest to is that the trainers all have different techniques on how they do things. all being correct for them. take what you hear from all us bastards and use what works....

first of all AIM AT THE COCKPIT! i will maneuver myself AND the con into a position where i am able to fire at the cockpit, and i don't let go until then. you want a plane form view of the
acft. where the top half of the acft is exposed to your guns. now there are times when you will fire at dead 6, ie con doesn't see you or he's trying to run. nail them then too, but give yourself a little bit of elevation on your .50's for drop (aim just above him).

convergence i set out at 275 to 300 in ponys, and 250 in everything else. fire within THAT parameter, keeping in mind that when you go from D4 to D3 your actually at D399 and closing. i almost always fire at D3 or less, UNLESS i am making a hi speed pass. then i'll open up at D5 and fire through D2 and pull out.

now lets talk about WHERE to throw you ammo for proper lead. imagine an acft standing on it's tail. nose 12'o clock, left wing 9'o clock, right wing 3'o clock. ok, with that in mind if the acft is in a right turn, you pull lead to shoot at 1 to 2'o. he turns to left, you throw ammo out at 10 to 11'o. this will let your bullets fall into his cockpit. how much lead you pull is predicated on how hard you're turning. rule of thumb here: above 200kts, if you pull more than 3 g's to get a shot, don't take it. execute a hi yoyo and reacquire. below 200kts, start using flaps and/or hi or lo yoyo's to get you into position.

as far as trim goes....bleh....i use trim very seldom. BUT, i make SURE i trim at a good fighting speed *PRIOR* to engagement. i will use 220 to 240 for pony (B/D), and about 210 - 220 for spit's (V/IX). and will vary that with most all acft i fly. so get your alt AWAY from enemies, get trimmed out, and go gettum. (here's what i do for comparison. i will get to at least 15k. i will level out with auto trim by hitting "X". then once the acft has accelerated to my preferred speed, i will hit "X" TWICE. once to disengage, once to re-engage at that speed. then i start looking for cons.) now i will use trim for minor adjustments if i am diving or climbing either following a con or (heaven forbid) running. also, when you fly the p40 (B or E) trim MUST be used to make that acft handle well and dance like a ballerina. but remember, once you start playing with trim, you have to retrim your acft again to fighting speed after you've egressed the fight.

in the final analysis, you should always keep you speed and SA up while engaged. getting that kill is NOT as important as surviving (or IMHO, covering another bastard). alot of gunnery has to do with processor speed and connection.

one thing i take very seriously is my gunnery. guess it comes from my dad teaching me to hit what the hell i aim at the first time, and kill it. hehhe.

_Bonger:_

I'll add one other thing to watch for: Make sure you are "carefully squeezing the trigger" and not moving the stick back a bit as you yank the trigger. I caught myself doing this a while back.