Little Aberdeen Reports

Posts by Vic Vondrasek to the SPWW2 Yahoo Groups

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Introduction

Over the years the SPWW2 Yahoo group was active, Vic Vondrasek made a series of *Little Aberdeen* reports examining various aspects of the game with reasoned insight, great detail and always with humour. While some of the information may be outdated in later versions, there is always something to learn.

The wisdom is Vic's any errors are mine;

PatG

"Little Aberdeen"; some advice requested please...

Date: Mon Jan 6, 2003 11:22 am

hiya,
being snowed in and with time on my hands I've decided to build my own costing algorithm and to do weapons testing on my virtual "proving grounds". since i don't have the SPWW2 code the only way to determine weapons effectiveness is to test them on my "firing range" to determine how they perform relatively on assorted targets. i have a friend who is a very high powered statistician type who can help with the number crunching.

i will be testing various delivery systems (direct fire, indirect fire, air) as well to determine their impact on effectiveness.

1. i have MS excel spreadsheet software but am unsure if there is a way to move data from the spob files to a spreadsheet and vice versa. therefore the first bit of advice i need is where to find info on how to do this.
2. i need a few hints about the code:
a. is there one or more than one algorithm for air delivery?
i.e. are there different models for accuracy and effectiveness for fighters, dive bombers, level bombers or is there one model that simply looks at the data in the weapons and unit tables?
b. same as a. above for direct fire vs. indirect fire.

i plan to do extensive testing so it will take time. if anyone has any weapons systems they have an interest in I'll tackle those first as the order in which i do these isn't important to me. just post the weapons you want me to test here and use something like "vic, weapons test" as a subject line. that way people will know if one they want tested is already in the queue.

thanks!

best regards,
vic

Indirect fire questions

Date: Tue Jan 14, 2003 9:42 am

hiya,

1.a. in testing indirect fire i have noted that dispersion of impact hexes doesn't seem to be a function of range. e.g. i tested indirect 60mm (USMC) mortar fire at hexes both at maximum and minimum ranges with the distribution of impact hexes seemingly as bad (inexperienced unit) for the minimum range target as for the max. on occasion at minimum range the mortar fired on an adjacent hex and i believe (?)

fired once on itself. (!!) the distribution of fall of shot was unbelievably wild. (e.g. on occasion distance of fall of shot from target hex, i.e. deviation, exceeded range to target hex.) does accuracy vary with range or is the same dispersion going to occur irrespective of range from firing unit to target (all other things being equal)? can the user do anything to reduce deviation of fall of shot from indirect fire? will a large increase in the "accuracy" field in the weapon record help?

b. another experiment i tried involved giving the firing unit a LOS to the indirect fire target hex. this did not appear to improve accuracy. am i correct?

c. another test involved repeated fire on the same hex. again, accuracy did not improve, in fact on some occasions it got worse. does repeated indirect fire on the same hex ever result in improved accuracy? if so, under what conditions of observation?

d. in testing 60mm USMC mortars in a campaign i find them to be slightly more dangerous to the Marines than for the opposing Japanese. standoff range (i.e. range the Marines must maintain from the target hex to avoid being hit by friendly fire) frequently exceeds the range at which enemy units are spotted. i.e. if one is close enough to see them one is too close to call indirect fire.

2.a. regarding rate of fire, my 60mm mortar test also resulted in an inexperienced unit (exp=66) firing 18 rounds per tube per turn of a combat load of 45 per tube (new v5.6 load out, old load out was i believe 60 rounds). this rate exhausts ammunition in 2.5 turns or about (depending on which time scale one subscribes to) 5 to 10 minutes of fire. this seems awfully fast.

b. my understanding was more experienced units had higher rates of fire (I'm used to mortars firing about 6 rounds per tube per turn). as this unit gains experience is it going to fire at an even higher rate?

b. can i reduce the number of rounds fired per turn by reducing "ROF" in the unit record (via mobhack)? does the "weapon size" field in the weapon record have an impact on firing rate? (seems i remember that it affects reload rate at least.) what other parameters can effect rate of fire?

thanks!

best regards,
vic

Re: indirect fire questions...("little Aberdeen" report)

Date: Tue Jan 14, 2003 11:32 am

hiya,

another test.

1. observing unit HQ, firing unit 60mm mortar (USMC)
2. target hex 2 hexes to the immediate front of the HQ unit and in HQ unit LOS; map visibility 20+ hexes
3. firing unit one hex behind HQ unit (i.e. range to target 3 hexes, about 150 meters/yards) with the firing unit ALSO having an LOS to the target hex.
4. adjusted accuracy (weapon file, mobhack) to 255, the maximum value.
5. one test; results here were so consistent with game play (campaign, several battles) experience that more exhaustive tests were deemed unnecessary.

it is hard to imagine a test design that should produce better results re: range and visibility and weapon accuracy.

results:

a. 48 rounds fired (3 tubes @ 16 rounds per tube); experience = 72
b. hits on target hex = 5 (range = 3) about 10%
c. hits on observing HQ unit = 4 (range = 1, immediately adjacent to and in front of firing hex)
d. hits on firing unit = 2 (range = 0, i.e. 60mm mortar self-inflicted fire)

so, the firing unit hit itself and the observing unit more often than the target hex when both had the target in view (LOS). although, given the apparent range-independent nature of the dispersion model longer ranges should preclude hits on the observing and firing units. in addition, many rounds were observed falling four or more hexes from the target hex (i.e. deviation > range to target.) happily, no fire fell BEHIND the firing unit, an apparent "safe zone". it was also noted that in this test the unit was more experienced than the unit tested earlier and fired FEWER rounds per turn (16 as opposed to 18 earlier).

concurrently a different 60mm mortar unit fired at a target hex at near max range (r = 38, max = 40) with neither the firing nor observing units having an LOS to the target with shot dispersion similar. again about 10% of total rounds fired (total = 51) were observed to hit the target. impact area was about 10 hexes deep (target hex plus 4 over and 5 short) and 7 hexes wide (70 square hexes with 2500 sq meters/yards per hex; or about 175,000 square meters/yards and generally centered on the target hex.)

history:

the 60mm mortar was a well proven weapon, noted for being able to produce an accurate and consistent fall of shot under a wide variety of conditions (e.g. temperature, humidity etc.). it was simple to use and very effective. even field trained personnel ("on the job

training") became relatively proficient in its use in a short period of time. the USMC employed it both in infantry company weapons platoons and battalion weapons companies (along with the 81mm model of largely similar design).

the US Army pretty much limited it to rifle companies. both the US Army and USMC employed it in VERY close support of front line troops, frequently targeting it a few dozen yards in front of friendly positions. upon assuming positions, the mortars were set up and a few ranging rounds typically fired at varying ranges to the company front to register fire (USMC did this as a matter of procedure.)

conclusion:

the observed fire performance of this weapon in spww2 renders it pretty much useless in its historic role. its high cost in v5.6 coupled with its propensity to inflicted friendly casualties/suppression at a rate comparable to enemy casualties/suppression makes it an extremely poor purchase. (tests of off board 105mm FHs for example show fire dispersion areas that are a small fraction of that observed for this weapon. observers with a LOS produced impacts for the 105 that were rarely more than 3 hexes from the target hex in any direction.)

ammunition for this weapon is exhausted rapidly (probably a good thing for friendlies! in point of fact reducing ammunition load out to zero would make the weapon noticeably safer. <g>) and is slow to reload. players acquiring it as part of campaign core formations should upgrade/replace it with other more useful units (e.g. MGs) as rapidly as possible.

an outstanding WW2 memoir was written by a Marine mortar man many years ago and is cited here as it contains information of interest about this weapon and its use. in addition it is a very good read.

With the Old Breed at Peleliu and Okinawa
by E.B. Sledge (Marine mortar man, later college professor. Dr. Sledge
passed away in the late 90's i believe.)
paperback edition, Bantam Books 1986 (3rd printing)
copyright by Presidio Press, November, 1981

best regards,
vic

Little Aberdeen Report - Air attacks on bunkers

Date: Wed Jan 22, 2003 9:33 am

hiya,

in an attempt to begin to quantify air unit values before attempting beach assaults,preliminary tests were conducted early this morning, pilots being roused from slumber at 0500, briefing at 0545 followed by takeoff.

air units: US TBF Avengers with 4x500 pound bombs
target: Japanese MG bunker (wood/earth) with crew of 13
visibility: 50 hexes
observing unit: USMC FO
range from observing unit to target ten (10) hexes.
observing unit had LOS?: yes, at all times
attack path: NE to SW (North being top of map), USMC pilots

test #1:

the avengers made single plane attacks on each of five (5) consecutive turns. this test was repeated 48 times for a total of 240 individual attacks.

results: the Japanese suffered one (1) casualty on three of the 48 tests (total three casualties). the bunkers status on the turn immediately following the fifth attack was "pinned" four (4) times and was "ready on all other occasions (44). the Marine pilots placed one bomb of the sequential drop of four on the target hex most (75%+) of the time, generally to no effect whatsoever.

notes: after the first few attacks the Japanese defenders began taunting the Marine pilots, yelling things like "Marine pilots cross-eyed!" and the like. Many of the Japanese defenders eventually moved to the top of the bunker to sun themselves, read magazines and drink beer. several were observed to drop their trousers and "moon" the Marine pilots.

this kind of behavior quite naturally left the Marine pilots angry, frustrated and begging for "another shot at the sons of *******" (hint, NOT "Nippon"). therefore i arranged...

test #2

everything was as in test #1 except the Marines would make 102 (yes one hundred and two) attacks all on the same turn! 4 bombs per plane x 500 lbs. each x 102 planes = 240,000 pounds or 120 TONS of ordinance on one bunker in one turn. even if one assumes that this should be divided by four as the game structure is such that only one bomb of the sequence can hit the target hex, it's still 30 tons. (in any one battle in a long campaign it is unlikely that a player can/will purchase more than about 4 to 6 aircraft.) the Marine pilots felt somewhat embarrassed at the blatant level of overkill/one sidedness involved in such a test but were anxious to quell the

Japanese taunts. ("Hey Marines, drop bombs on ocean, maybe you can hit THAT! hahahaha")

after this massive assault was over the marine pilots landed and rushed to the bunker to observe the results of their attack. of the 13 original crew of the bunker 10 had become casualties (2 dead, 8 wounded) the three remaining crewmen were playing pinochle and their "pinned" status reverted to "ready" on the next turn. they were never even chased out of the bunker. (one offered a Marine pilot a beer out of their cooler and that pilot had to be restrained.)

the Marine pilots were inconsolable, many requesting transfer to non-combat outfits or showing signs of post traumatic stress syndrome. "chaplain" and "psychological counseling" units were added to the Marine spob in an effort to return some of these highly trained carrier based aviators to duty for later employment.

cost of the 102 TBF's that inflicted the 10 casualties and pinned status of three troops for one turn? 102 aircraft x 89 points = 9078 points. this is an amount equivalent to approximately 44 (forty-four) Marine rifle companies circa Aug '43 (204 points each). there were approximately 27 Marine rifle companies in a division (3 companies per battalion, 3 battalions per regiment, 3 regiments per division) during most of WW2. the 44 companies represent the strength of about 14 Marine battalions or 1.5 divisions, less heavy weapons companies.

conclusion: if you want to take out bunkers, don't use planes. indicated value of the TBF, adding a liberal amount for potential (?) collateral damage to other hexes and "intelligence value", about 8 or 9 points rather than the 89 assigned.

best,
vic

Del replies:

Date: Thu Jan 23, 2003 8:26 am

The guys loading the munitions on your aircraft were probably laughing their butts off because they had to roll the 500lb fire crackers past the SBD Dauntless loaded with 1500lb bombs that you should have been using in the first place. ;)

Sometimes it's not so much about how badly an aircraft performs as how badly the load out was chosen. If you are going to spend buy points on aircraft and
it's an assault scenario where you think you may engage fortifications then get something that will have a good chance of busting them...if they get hit. My favorite is napalm when available.

Del

Vic replies to Del

Date: Fri Feb 28, 2003 5:59 pm

Del,

yup, understand that. i could have chosen tanks at point blank range too. and 1500 pounders will of course do it faster (as would nuclear weapons, <g>) but the point is that 30 tons of ordinance all at one time (relatively) in one place is still 30 tons of ordinance.

16" naval guns were called "swimming pool makers" because they created craters about 200 feet in diameter (60+ yards) and weighed in at something in excess of a half ton. it's not the size but the cumulative effect i was attempting to address. pick any surface feature you wish in 50x50 yards/meters, put 30 tons of HE on it (I'm assuming only 25% of the load reached the target hex) in the space of a few minutes and tell me what you think would be left. in terms of personnel, the concussion effect alone would be lethal. bombs/shells don't have to produce flesh penetrating wounds to kill or incapacitate. (think "shell shock")

the whole purpose of the test was the feeling i had that bombs/shells are being treated by the code like "big bullets". i.e. they hit or they miss and if they miss no damage accrues. am i wrong? i DELIBERATELY selected ordinance of a size that wouldn't be an easy "one-hit-kill" for the test. (although if you test 1500 pounders you may be in for a surprise.)

i do this kind of stuff because i love this game. i also try to inject a little humor to make what i write a little bit more fun to read. the spcamo guys devote a lot of their time gratis to this endeavor; they give SPWW2 their best shot; should i do less? if i see something that looks like it could be improved upon should i remain silent? i just try to do what little i can to provide data for the development crew to look at. if my ideas/representations are bullshit then they'll be exposed for what they are and I'll look pretty silly. if that happens, it won't be the first time <g> so I'm not particularly worried.

best regards,
vic

Little Aberdeen report - Air attacks on flak positions

Date: Wed Jan 22, 2003 10:17 am

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hiya,

well the Japanese commander lobbied me for another test where his
guys had a chance to shoot back!  the test was pretty much the same
as the preceding one except instead of the bunker the Japanese got a
twin 25mm flak emplacement (they were defending against a Marine
assault).

cost of the 12mm = 26 points (crew=6)
cost of the TBF = 89 points

results for 10 individual attacks (replayed a one attack scenario 10
times):

Japanese:

gun destroyed = 0
5 crew kia/wia = 1
2 crew kia/wia = 1
1 crew kia/wia = 4
0 crew kia/wia = 4

the crew was only "pinned" once and was "ready" the other 9 times.
average loss 1.1 crew or about 5 points (26/6).


USMC:

The Marine TBF was damaged twice and shot down once in 10 attacks.
since for aircraft a damage is as good as a kill (they can't attack
again) the marine loss was 89 x 3 or 267 points or an average loss of
26 points.

Conclusion: it is left to the reader to draw the obvious conclusion.

best,
vic
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Little Aberdeen Report -Target of the Month - DUKW

Date: Tue Apr 8, 2003 3:04 pm

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Hiya,
in an effort to scrounge up extra VPs wherever we can (lord knows we
need 'em) we're always on the prowl for good targets and do we have a
beauty for you this month.

it's none other than the redoubtable US Army DUKW ("Duck") amphibious
transport. talk about stats, this baby has it all, big (size 4), not
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too fast (like 16:4 i think), totally unarmored and equipped with 1 x .50AAMG. best of all bag one of these birds and it's a plump 28 points! yup, KO'ing only three of 'em gets you the same yield as annihilating, to the last man, two thirds of a company (six squads) of prime US infantry circa 1944 or any US tank you care to name with some to spare. and, like their namesake, these "ducks" don't shoot back! if they're carrying troops you may pick up a few extra kill points as a bonus.

we did a little DUKW hunting with some prime wing shooting hardware. we used the towed versions of the GE 20mm flak 30/38, the 37mm flak 36 and gave the feldgrau a little target practice with an MG42.

well, it was duck soup. the flak gunners, using a mix of randomly selected (average experience, august '44 menu picks) 20mm and 37mm, scored hits on 28 of 62 shots at ranges from 30 to 52 hexes at targets both stationary (aka "sitting DUKWs") and moving at top speed (land). scoring first volleys only, six of twelve targets were destroyed, four damaged and two went unscathed. best results came at ranges of around 40 hexes.

feldwebel schwendt quacked his target with a 20mm at range 43 (max is 44) on 2 for 2 shooting at a high speed target! bravo feldwebel! (he wins a three day pass to hamburg for himself and his happy crew for a little r & r.) none of the "ducks" spotted any of the firing units outside a range of 30 hexes. (the searching preference was set to 100). the firing units spotted the targets as soon as they entered LOS (visibility 56).

other than the 37mm's slightly longer reach there wasn't much to choose between the 20's and 37's. of the six DUKWs splashed four were stationary and two were moving at top speed. on those six targets, hits were 20 for 24, splendid shooting. closer range and/or slower speed, water borne target tests were deemed unnecessary. (besides, volunteers for more tests from among the surviving DUKW crews were hard to get!) for the expenditure of 62 rounds of 20 and 37mm we scored 168 kill points plus maybe a few for the damaged units. figure around 2.7+ KP/rd fired, which is mighty tough to beat.

the MG crews fared less well. on targets ranging from 13 to 24 hexes hits were 10 for 32 with two targets destroyed, two damaged, two undamaged. the units destroyed were moving at top speed (as were the other four) at a range of 18 hexes on 8 for 10 shooting. it's presumed the MGs would do better given a comparable mix of stationary and moving targets. given range of 24 we felt it was unlikely the MGs would catch DUKWs stationary.

happy hunting!

best,
vic

Doug McBratney replies:

Date: Wed Apr 9, 2003 9:01 am

I usually defer OOB questions to other members of SPCAMO but I'll take this one :)

First, all unit values are calculated with a formula that I have not memorized or frankly even looked at because I do not design. So take this with a grain of salt.

I am guessing that the high cost of the DUKW is calculated based on amphib capability and carry capacity, not combat value. Those things were *incredibly* valuable in getting supplies from ships to the shore where there were no port facilities. But they were NOT used in combat any more than a truck was. The AA gun probably really was just for AA defense, not to suppress enemy ground defenders. So if a player
uses them as assault vehicles, he should be heavily penalized for stupidity because his onshore infantry will now be un-supplied! And if
you manage to maneuver your AA guns to a position to fire on an undefended beach landing force, you deserve the extra points!

Doug

Edward R. Mortimer replies:

Date: Wed Apr 9, 2003 12:56 pm

Gentlemen,

The amphibious ability of a unit contributes to it's combat value. The DUKW is used to ferry troops across water -- next time you have a company of soldiers stranded on the wrong side of a river ask yourself if you want a fleet of trucks, or 2 DUKWs.

Do not take a unit out of it's element and then say the price is wrong. A DUKW is not a truck with a machine gun. A DUKW is an amphibious transport. A DUKW without water to cross shouldn't be on the battlefield -- it's the same as a tank in a giant rice paddy . . . worthless.

Little Aberdeen Report - Way point tests, phase I

Date: Sat Jun 7, 2003 6:17 pm

ok, so i couldn't wait...v 5.6

test 1: 15 one unit infantry platoons (i.e. single squads) moving west to east over varied terrain. way points set during first turn. unit AI control turned on before way points set. A0 unit set to human control. one way point per hex. no way point set in the hex immediately to the unit's front. no enemy contact, no enemy visible. way points set in adjacent hexes, zigzag pattern eastward, 10 way points total.

results: turn 1: units reached one two or three (road moves) way points (depending on terrain), moving the maximum distance possible. in all cases at the start of turn #2 only way points 9 and 10 remained. some divergence by units from the planned path to use roads was noted.

turn 2: units again moved the maximum, none reached way points 9 or 10 and all way points had been removed.

test 2: same as test 1 except way points were set in a straight line eastward, one way point in alternating hexes (i.e 31, 33, 35 etc.) the 10 way points covering 20 hexes (2x10).

results: generally: in this test significant/persistent deviation from the straight line plotted path was noted for units facing difficult terrain. units moved SE to take roads in order to avoid streams and swamps and units plotted through a series of wooded hexes opted for a clear terrain path instead. when a road was available parallel and adjacent to the plotted path the units opted for the road rather than the plotted path even though plotted way points were in alternating hexes.

turn 1: of 15 units tested, 8 units reached/passed near to one of their plotted way points and 6 way points remained 4 having been removed including the one actually reached (3 "vanished"). 4 units reached two plotted hexes and 5 way points remained (3 "vanished"). these units had SOME road movement component. 2 units reached 3 way points and had 4 remaining (again 3 "vanished") these units having made road movement exclusively. one unit reached none of its plotted way points having made a significant detour to use a road in order to avoid swampy/stream terrain. it "followed" the adjacent unit whose path was plotted straight down the road. 7 of its plotted way points remained.

turn 2:

the same pattern was observed, units generally reaching one or two way points and having some "vanish" although in turn 2 the number of way points disappearing decreased from the standard 3 observed in turn one. in some cases no way points "vanished" and in other cases it was one or two. at the end of turn 2, way points remaining varied from 1 to five (!!) the road move units having of course moved furthest and had the fewest remaining. the unit which made the large detour stuck to the road apparently to remain on the road course until a relatively unobstructed route was available to the next remaining way point

initial conclusions: units do not like to move through "slower" terrain even if plotted there. there appears to be something "special" going on regarding removal of unreached way points in turn one, i.e. it appears to occur more consistently and to a greater degree then.

best,
vic

Little Aberdeen Report - Way point tests, phase II, mounted units

Date: Sat Jun 7, 2003 6:54 pm

testing the effect of setting way points for infantry then mounting them on transport and moving them.

test 1:
test parameters: 4 single unit infantry platoons ("0" unit only), A0 unit and transport units set to human control.

nothing was done during the deployment phase. during turn 1 a series of 10 way points plotted in a straight line in alternating hexes was set for each of the infantry squads. the first of these way points was set approximately 30 hexes from the infantry units and their adjacent HT's.

the infantry units were then moved to the HT's, mounted and the HT's moved under human control about 10 hexes each. the infantry was left mounted and the turn ended.

at the start of turn 2 the infantry units were dismounted and the way points checked. it was found that of the original 10 way points (the closet still being well distant) the nearest 2 had "vanished".

the units were remounted the half-tracks moved about 6-8 hexes and stopped. the infantry units were left mounted and the turn ended.

the units were dismounted at the start of turn three (no movement) and the way points checked again. as in the previous turn, 2 more way points had disappeared, with 6 now remaining.

conclusion: it appears that for mounted infantry, way points plotted prior to subsequent mounted movement are removed at the rate of two way points per turn when such units do not reach and are not in close proximity to the plotted way points

best,
vic

Little Aberdeen Report -Concrete buildings can be hazardous to your health

Date: Sat Jun 28, 2003 11:55 pm

Hiya,

Testing rifle fire. two tests.

first test. units 7 hexes apart in clear terrain, both stationary for several turns, zero suppression and "ready" status. firing unit fires
6 "rounds" (pulses) in one turn at target unit. 24 trials. both units have "spotted" the opposition. no return/op fire fire from target unit. all experience, morale, rally and inf command = 70. preferences all set to 100. firing and target units were 12 man rifle squads. v5.6. rifle fire only, no movement other than AI retreat by either firing or target unit.

second test, same as first except target unit is in a single hex concrete/stone building.

well, you might think you'd be safer in the concrete building but the test results indicate you're marginally safer in clear terrain. there's an XL spread sheet in the Aberdeen folder in the files section. all the test results will be posted there.

summary per 6 "rounds" of fire in one game turn:

mean casualties, clear: .708
mean casualties, bldg.: .750

median casualties for both: 1

mean suppression, clear: 5.875
mean suppression, bldg.: 3.875

median suppression for both: 5 to 8%

one trial in clear terrain had a suppression of 22% which somewhat skewed the results. in one case a target unit quit a building with casualties on the first (!!) fire pulse. earliest retreat in clear

terrain was on the 2nd pulse.

this explains why it's impossible to defend building hexes from even lightly armed units approaching over open ground or with a LOS to the building. troops are easily "shot" out of buildings by rifle fire alone and that in a 1:1 ratio. these tests included NO organic MG supporting fires as all weapons other than rifles were turned off.

also there is no apparent relationship between casualties and suppression. in many cases they are inversely proportional. (i.e higher casualties yields lower suppression.)

suggestions:
1. as a first trial, reduce casualty rates for units in concrete buildings by about 66%. (i.e. throw in a .33 multiplier on the firing end.)
2. as a first trial, reduce suppression rates for units in concrete buildings by about 50%.
3. review the mechanics/relationship of casualty and suppression calculations in order to develop some logical relationship.
4. publish a terrain effects chart for fire and movement so they can be reviewed and tested first where the obvious problems are apparent
5. the big one....remove fire data from the executable and table it (as with the ".ini" files or the ".oob" files) so it can be subjected to testing under varying conditions and with variable levels. (in point of fact ALL data elements should be given this treatment. one little slip in data now requires a release/patch of the executable to fix and a 6 month wait. case in point, the mortar problems in v5.6.)
6. publish the casualty/suppression and fire formulas so they can be reviewed and tested. clearly, "something ain't right".

the guess here (based on subjective play experience) is that rough terrain and woods also do not afford the protection from small arms fire they should. a further guess is units moving, even slowly, in good defensive terrain/cover suffer much higher casualty rates than they should (2 to 3 times is an offhand estimate). these conditions will be tested also.

rifle fire against units in good defensive positions/cover from 350 meters range at a 1:1 density ratio should be a minor annoyance at best (kinda like a bad mosquito problem) for "average" troops. if everyone keeps their head down nobody gets hurt. it should take about a 3:1 ratio in rifle (only) fire just to pin troops in such positions. some (minor) suppression and the once-in-a-blue-moon kill, say 1/250+ chance of a single casualty per 12 troops firing (to model the soon-to-be-mourned idiot who stands up to see what's going on), would be about right.

in point of fact most troops won't fire (rightly) in such static conditions as the probability of exposing one's position far exceeds the minuscule chance of getting a hit. those who do this are "sniper fodder".

it takes SERIOUS firepower (mortars, MGs, arty, direct HE fire) and prep time to support attacks against such positions, long range rifle fire is useless. barring sufficient supporting fires one can expect to incur very heavy casualties in moving against buildings and

driving defenders out. (suggested study, the Monte Casino action, Stalingrad, some of the village actions in Sicily, hedgerows in France, etc.)

best,
vic

Little Aberdeen Report - Unit of the Month - Snipers

Date: Thu Jul 17, 2003 8:43 pm

hiya,
boy we have a little beauty this time, and i do mean little. we're talking snipers here. not those 40 point monstrosities but the cheapo 7 point best-shot-at-the-county-fair guys.

across all oobs they have proven to be nifty infiltrators and intelligence gatherers.

here's the trick, you turn their weapons (sniper rifle and grenade) OFF and leave 'em off (unless you have a very, very compelling reason to shoot; e.g. i almost clipped the opposing A0 in a human vs. human game). you don't want them giving themselves away doing useless opfire. if they don't shoot they are tough to spot especially if they move slowly; I've even had 'em bump into enemy units and not get spotted. they are better scouts than the 4-man "scout" units and way, way cheaper.

you can only buy scouts in pairs and a pair will cost you 30 points or so while these babies go for 7 and live a whole lot longer. DON'T buy pairs of snipers, just singletons.

the snipers are murderously effective in (long) campaign games here's what you do:

1. be careful with them and let 'em build up experience for a few battles. once they get experience over 85 or so they seem to be almost invisible. if they get experience over 100 (elite) it's "beam me up Scotty" time.
2. don't have 'em popping off at just any old target. in the beginning only let them fire in no risk situations so they get a few easy kills; that'll build their experience faster. i fatten 'em up on wounded POWs usually <g>
3. let 'em call some artillery now and then; they're "0" units so they can do that (why you don't want the pairs of snipers, the "second man" usually can't call arty.) a little of this and their arty rating gets decent and you have a sort of ersatz FO. losing an FO costs a ton and losing one of these guys costs 7.
4. once they've been around for a while and can shoot some, infiltrate them and turn 'em loose on AA or AT gun crews either sniping or calling fire. i had one sniper cap two entire russkie AA gun crews without ever getting shot at in return. nothing saves aircraft like dead flak crews. also your tanks live longer if all the AT gun crews have little holes in their foreheads <g>.
5. i now buy one per infantry company and cross attach them as a sort

of "company scout". it uses up a slot but these beauties are worth their weight in gold. once they slip through densely enemy occupied areas and get BEHIND the enemy mass they really shine as FOs. you know how all that smoke in front of enemy positions wrecks your LOS? these guys have a clear view of everything; nothing like back shooting. stick 'em on an elevation where they have good visibility and your arty gets really nasty.
6. when in "indian country" never move them their full move allowance. keep a hex or two in reserve so if they run into something they can back off or duck for cover.
7. they can be really valuable in those low visibility games/situations where running into the opposition happens often and costs you half a squad every time it does (woods, urban etc.). this is especially true in human vs. human games with a skillful opponent who is good at setting infantry ambushes at range 1 visibility.
8. even though they don't have the high fire control ratings etc. of their more costly cousins they can be pretty tough when experienced. sniper rifles have an HE kill = 2 which isn't bad. let 'em set up on a target (gun crews are nice because they don't move much) for a turn or two with the opponent "targeted" but the sniper rifle turned off. once their settled in let 'em squeeze of one or at most two rounds per turn. they won't give away their position that way. if the bad guys get active slide off to another spot and repeat.
9. in urban environments find spots that have limited visibility (say one or two hexes) at something over rifle range and wait for something to walk into that hex. even if they do get spotted (and they usually won't) they're out of rifle range AND only one or two units have a LOS to them.

give these guys a try!

best,
vic

Little Aberdeen Report - casualty stats, end of game

Date: Wed Jul 23, 2003 4:19 am

hiya,
a brief test (i didn't get around to aircrew but I'll bet they work the same) shows that the "men" casualty stat on the recap screen shows every cotton pickin' man dropped. leg units and vehicle crew (whether bailed or croaked in their conveyance) get racked up in the "men" stat. good news for our tournament players who now need ONLY report "score" and "men" for both sides at the end of each scenario!

outstanding! and impressive accounting technique.

best,
vic

Richard Hopkins replies:

Vic,

Won't you also need 'AFV' etc to take account of different-sized crews?

Richard

Vic replies:

Date: Wed Jul 23, 2003 4:18 pm

hiya,
it appears as if each crew is assessed uniquely for size. e.g. a zapped truck added exactly 2 to the casualty count and the sfw added 32 for a wiped out off-board arty unit!

i have not tr1ed different size tank crew yet (e.g. a five and a four) but at this point it looks plenty accurate enough. a body here or there will be considered "wounded, returned to duty" to save players a lot of reporting for a casualty or two. also looks like NO men are added to the stat if crew bail. the bailed crew are only added when dispatched. (a nice future enhancement would be to have the software write next-of-kin letters home, very time consuming <g>)

the one (very minor) glitch i noted was that the GUNS for off-board arty are not included in the "arty" stat for destroyed arty WEAPONS, even when they are reported "destroyed" (OB guns are far enough to the rear to be salvaged perhaps?). looks as if the damage recap only reports off-board MEN capped. also still haven't checked aircrew but that should be minor and i bet it works too. (besides, the aviators have parachutes. no "going down with the ship" like the gallant navy types! every time i checked my crashed planes...no bodies. must be at the local tavern. <g>)

to repeat, tournament players need only report "score" AND "men" for BOTH sides INDEPENDENTLY to me, 2 stats instead of 8 or 9.

a tip o' the hat to the SPCamo crew for very thorough work.

best,
vic

Little Aberdeen Report - modeling snipers in SPWW2

Date: Fri Aug 29, 2003 7:49 pm

hiya,
something you may want to try...

most nations used two-man sniper teams (sniper and spotter) rather than the one-man units the games uses. to model this there are a couple of options.

option one

a. increase "men" to 2
b. put a regular rifle in the unit weapon slot one
c. put a sniper rifle in the unit weapon slot two

assuming the unit had say 50 rounds of sniper ammo give slot one say 30 rounds (remember this will use fire x 2 men) and give slot two 30 rounds. this will model sniper fire of one weapon at range greater than regular rifle range (usually 10 hexes but i use a rifle range of 7 in all my oobs) and permit two-man "regular fire" at shorter ranges when the sniper rifle is switched off. this is more useful in human vs. human tests as the AI won't switch weapons off.

option two

a. men = 2
b. pistol (or some other weapon range = 1) in unit weapon slot one
c. sniper rifle in slot two
d. regular rifle in slot three

use 50 rounds for both rifles. the pistol is in essence a "place holder" which prevents primary weapons fire (the rifles) from being multiplied by the number of men, in this case two. the multiplier only works for PI weapons in slot one. this option gives you in effect two men, one with a sniper rifle and one with a regular rifle; you can substitute an SMG for the regular rifle if you wish. it is unlikely the pistol will ever be used.

most nation's oobs use one-man snipers except for Japan (oob 5) which uses two-man teams. this is paradoxical as the Japanese were much more likely to use single snipers than other nations. for some reason in the island campaigns they were fond of placing snipers in trees, which is essentially suicidal as there is no way to retreat/evade once fire is opened. (the USMC dealt with this by locating the general direction from which the fire came and then spraying all the treetops with automatic weapons fire, the BAR being a particular sniper eradication favorite.) the Japanese also employed the one-man "spider hole".

for the Japanese, try modeling one-man teams with lower unit fire control, range finder and cost. for all snipers the following weapons file adjustments are recommended as the default settings make snipers incredibly lethal. sniper rifles are usually in oob weapons slot 146:

1. "accuracy", default is 30 try 20 instead
2. "HE kill" default is 2, i use HEK = 1 the same as a regular rifle.

this change also warrants a reduction in unit cost for sniper units.

in process: testing the effects of increased accuracy factors for aircraft (weapons class 11) weapons (default accuracy equals one). also due up, another look at flak lethality versus aircraft targets. objective is to get aircraft firepower, survivability and cost into balance.

best,
vic

Little Aberdeen Report - to LOS or not to LOS?

Date: Sun Nov 9, 2003 2:36 am

hiya,

ever had the situation where you had a REALLY juicy concentration of bad guy infantry (or maybe a pesky AT gun) just begging for an artillery concentration and no LOS to the optimal target hex? we all have. we here at LA got to thinking (something we usually avoid) about whether a non LOS shot directly on the target hex with a highly skilled observer (like an FO) was preferable to a less skilled observer that had a good LOS in close proximity to (but not on) the target hex. while an FO gets his licks in more often, it's believed here that he still gets hit with the significant casualty reduction penalty (50%?) levied on non LOS arty fire. (SPCamo please correct me if i am wrong here.)

so, it was off to the v6 test bed to burn a few caps. in previous trials the Americans put in a fair amount of time as targets so we decided to let them pull the lanyards on a battery of M2 105's, that staple shootin' iron of FA regiments. bty B, 1st bn of the 452d FA regt (NY NG, CO'd by cpt. Edgar Foster USA, ret.) volunteered to do the heavy work. in the spirit of allied cooperation (and possibly as a conciliatory gesture) the French army contributed several battalions of targets! the yanks were so touched by this gesture they offered to buy the French the beverage of their choice for a little tippling before the test commenced. displaying real savoir faire (not to mention good taste) the French selected a recent vintage (October) of a fine Napa Valley (CA) white zinfandel, the kind with the screw-off cap as cork extraction hardware was in short supply.

after the French were feeling no pain figuratively, off they went to the test range where they would feel some literally. 8 squads of Frenchmen were placed in a seven hex "circle", one squad each in the outer 6 hexes and two in the center hex as sort of a "bull's eye". observers varied from company co's with low arty ratings to accomplished FO types. delay varied from .2 to .3 at impact. the targets were fired "blind", i.e not a pre-registered spot or a hex

that had been fired on previously. (tests with earlier versions of SPWW2 seemed to indicate that accuracy benefited from "re-fired" concentrations although this was not supported by compiling statistics, just more of a "feels like" thing.) firing was for one turn only and generally consisted of 16 to 20 rounds from the four tubes in the battery. the air was soon filled with the flutter of 105mm HE and subsequently French helmets, backpacks etc. when the dust had settled and the survivors had been treated for wounds the following conclusions seemed to be warranted:

1. with a DECENT non-FO observer (arty rating in the 40-45 range) shots to a hex immediately adjacent (!!) to the target hex can produce results on a par or better than an FO with no LOS. observers with a higher rating can do better than an FO shooting blind. suppression appears to benefit to a greater extent than casualties for "adjacent hex" shooters.
2. targeting shots with a good LOS MORE than one hex distant from the target hex is generally a waste of ammo but has some interesting ramifications. good observers will generally concentrate the fire too far from the target to be effective, but bad observers occasionally hit the jackpot! one inept observer (arty rating = 9) targeted his shot 4 hexes from the "bull's eye" and the boys from bty B unloaded all 16 rounds "on the money", i.e. deviation = 4 in the right direction! (he was so bad he was great.) this resulted in more cries of anguish than a bad batch of sauce bernaise.
3. the "one hex rule" is far more effective on infantry concentrations than on point targets (e.g. gun positions) for the obvious reason that there are many more viable targets in the neighborhood. although suppressing something like an AT gun is in many cases just as good as capping it.
4. also in the "feels like" category we noted what appears to be less dispersion of fire for all classes of observers. (one of the little tactics employed here was having isolated/surrounded bad observers call fire on the hex they occupy on the theory they can't hit what they're shooting at! kind of like standing next to the pin on a par three golf hole.)

disclaimer: total tests were a somewhat south of 200 which means that the number of trials may not be large enough to be "statistically significant". this was done to help with a decision in a game i was playing so the test couldn't be exhaustive due to time constraints. read "your results may vary". if anyone out there DOES note a variance please let me know and I'll have at it again in more depth when i have more time.

best,
vic

Miguel Guasch Aparicio replies

Date: Sun Nov 9, 2003 3:33 am

Very nice and interesting report, Vic

I employ arty spotters in two different ways. In pbem my main goal is to catch enemy infantry 'on the move', when most casualties are taken; to smoke screen my gallant advances, and to suppress enemy stationary targets, that is
in-cover units, geographical sexy features, and/or VHs. The main point in my pbem battles is artillery speed, as human opponents tend to change positions quicker than the AI. The artillery is plotted usually by the A0 unit, as his arty rating is enough good, and his delay time is less than other 0 units, except dedicated FOs... which I only buy in battles with more than 5000+-points by side. Never I use advanced *0 units, even with LOS, as the delay is usually longer.

In campaign games, I always buy an infantry FO as part of the core (and a nice field-gray VW for transport). He almost never has direct LOS to targets as his main goal is to catch the max experience (I will survive!) to have less time delay when plotting arty missions; it implies he must be secure at the rear most of the battles. As his experience and arty rating grows, he plots arty missions quicker and fires seems more accurate. My feel-like impression is that making casualties only occurs in important numbers when the enemy is catch in the open while moving (But I suspect that moving in woods has some terrible side effect causing more casualties... ummmh, nobody else noticed this?). Then, the suppressive effect is the most desirable effect, and I don't need direct LOS FOs to suppress, only to kill better... but this is again a feel-like thing.

As you can see, I can be misusing the arty FO capabilities, but the feel is that 'my way' works pretty well... ask my pbem friends! <VBG>

Best regards
Miki

Little Aberdeen Report - modeling the USMC/JPN Pacific conflict

Date: Wed May 5, 2004 5:02 am

hiya,
now that the Bush administration has reinstated our funding (election year and all) we were able to rehire our technical staff!

the R & D boys came up with this...

When fighting the Pacific campaign one encounters the less-than-realistic situation of hordes of JPN armored vehicles. For armor fans this is OK but some folks (guess who) like the difference in play generated by a "grunt" match. If you play the USMC campaign game

try this:

1. in the AI designated JPN armored car companies, replace the armored cars with snipers! put as many snipers in a platoon and as many platoons in a company to achieve the result you like. the AI is going to handle these guys like armored cars (the AI doesn't know they're snipers, it runs on the formation number), i.e. push 'em out front. normally armored cars just get all shot to hell. but if you set the searching parameter to about 70 (or less if you're feeling feisty) the snipers act like infiltrators! they are a real load especially on bigger maps and/or lower visibility where there is room for them to slide through. they raise a lot of hell all over the map. we also add a few snipers to the infantry companies for the same reason. note: if you're packing the map with units this isn't going to work as well. we made 'em cheap as they'll lose a few on the way in.

2. in the tank platoons/companies, replace the tanks with infantry leaving maybe a tank or two. if you make these formations big enough a curious thing happens. the AI seems to normally reserve some armor for EOG "response" or last ditch attack (strategic reserve). if the former tank units contain infantry, what you get is the banzai charge. the problem here is the infantry is slower than the tanks (duh) so the AI will get 'em in late on occasion. some you win, some you lose. to offset this. when the AI is assaulting (or advancing against a delay) add some turns to the default game length.

3. limit the purchase of USMC tanks to about one tank platoon per infantry BATTALION at most. we use one two-tank section per battalion except for assaults where we may throw in a couple of dozer tanks or flamers.

4. by the way, the rumor is that the Brits/Commonwealth and the US Army fought the Japanese too :) , so the same technique should work there as well.

5. you can also add a few bunkers to JPN rear area type units (mortars and flak) which makes running around in JPN rear areas a little more problematic on advances or meeting engagements (no more easy flak kills after penetrations). we cut the cost on the JPN bunkers some as they obviously are under-employed when the AI is assaulting. tinker with this 'til you get the balance you like. we also reduced the cost on the armor since employed as "singles" they aren't terribly effective (just like the real deal!).

6. set the spcamo type dispersed victory hex parameter (the .ini file) to 100 so you always get the dispersed hexes. this makes the snipers tougher to handle.

7. for the really REALLY ambitious: reduce rifle range for both sides to 7 hexes, (oh, and the US .45 SMG to 2). this cuts down on a lot of spurious max range op fire (faster play!) and also gets things more "up close and personal". lethality attenuation looks to be a function of max range and pretty much linear so this (for rifles) will be a matter of closing in to something on the order of 200-250 meters/yards to get the job done. [you'll see why the USMC greatly increased the number of MGs in units as the war progressed.] also try

halving the number of grenades per unit while doubling their HE kill in the weapons file. this simulates more grenades thrown at once and requires grenade expenditure to be managed more carefully.

best,
vic

Little Aberdeen Report - New Units !

Date: Wed May 5, 2004 6:18 pm

hiya,
with the (eagerly) anticipated expansion in the number of unit slots the R & D crew has suggested some additions:

1. Demolition team - 6 men with a carbine/smg in the first slot and 2 satchel charges each in slots 2,3,4 (HE). these are regular infantry (NOT engineers) useful for blowing stuff up. handy for bridge work or making an "alley" in urban areas where buildings prevent the passage of vehicles. size 1, speed 6. fit nicely in your smaller, higher speed transport. in urban combat one with each tank platoon can be real handy. cost 12?

2. Patrol - 5 troops with rifles, an smg and a half dozen grenades. these are again regular infantry, NOT scouts. size 1, speed 6. cheaper than the (overpriced?) scout teams at about 6. not stealthy (these are the guys that don't tape their dog tags together and run around with half-full canteens) they just go out and draw fire. when the Plt "looey" shows up at oh-dark-thirty and says "there's no moon tonight, who wants to go on a nice little patrol?", send these guys; they probably won't be coming back. also good for OP duty, they get off a couple of shots and then book for the CP to "report". :)

3. Ever wind up with a few extra support points and no way to spend 'em? we have the cure; it's the brand new "sentry" unit (copyright Little Aberdeen Enterprises, Inc., 2004). one guy with a rifle, a couple of clips of ammo (10 to 16 shots) and a brand new weapon (!!!), the thermos of coffee (or schnapps if you prefer). the thermos has range 1, accuracy 10 and is an AP weapon with penetration of zero. it can't kill anything but if the sentry hits a tank with it you get a satisfying "clunk" before the sentry gets ground up by the tank tracks. these guys are big (size 1) and slow (speed 3 or 4) 'cause they spend most of their time in the chow line. they're handy for picket duty or guarding key locations like road junctions (or beer halls or bordellos which they much prefer). you can also post
a couple outside your HQ in case the bad guys show up during your power nap. we put 'em in platoons of six and the best part is cost = 1! no more "leftover" support points! [we were gonna make 'em MPs but NOBODY likes those guys :)] give the formation healthy negative experience and morale factors (-5?) and you have the perfect sentry. we put a couple in the campaign core just to see if by the end of the campaign they can actually hit something with the rifle without turning tail.

4. Weapons company team (new formation, not a unit)- most nationalities had an integral weapons company in each infantry battalion, usually MGs and mortars. the MGs were usually assigned to the rifle companies (the default mobs show this) but with the formation assignment function you can build ad hoc companies. this formation consists of two units, a mortar team and an MG team, about one company's ratio of support. this way you don't have to buy entire mortar or MG platoons/sections if you're just adding one company with your support points. if you want to tack on an AT unit (infantry AT or light AT gun) be our guest.

5. Infantry company HQ unit - these have turned out to be a lot of fun. 6 guys with slot assignments, rifle, smg, sniper rifle (the CO's bodyguard) and grenades. speed 7, size zero and a cost of 18 (more?). good artillery spotters because of the size zero, company CP's are valuable targets as killing them disrupts C & C. we gave 'em the name "Company HQ" so they stand out. you have to be real careful with them; they draw fire like crazy in human vs. human games.

Enjoy! (and stay off the ridge lines!)

Best,
vic

Little Aberdeen Report - null plots of arty

Date: Wed May 5, 2004 6:18 pm

hiya,

occasionally off map arty will get hit by CB fire whether the unit is firing on map or is firing its own CB fires. in order to save a unit in a long campaign you may want to restrict the unit's fire to avoid further CB damage. turning the weapons off ("red") won't do the trick as the unit will STILL be capable of firing CB with the weapons off and may draw more CB fire resulting in its destruction.

what you need to do to save these units from further damage is turn the weapons off AND plot fire on a hex. the unit won't fire as the weapons are turned off and can't fire CB as it is "plotted". therefore there can be no further damage to the unit from enemy/AI CB fires as CB is apparently a "response" fire. (i.e if you don't fire an off map unit there will not be CB directed against it even if it has received CB fires previously.)

the other (fun) thing to do with null plots versus a human opponent is make 'em on roads, the more the better. your opponent sees the plots at the start of his turn even though no rounds are fired. my opponent recently did this to me and it had me diving my troops into the roadside ditches in anticipation of the "pending" concentration. we both got a good chuckle out of this when the game was over. a good way to keep the bad guys off the roads without firing a shot!

best, vic

Little Aberdeen Report - small arms weapon ranges

Date: Wed Jun 9, 2004 5:50 pm

hiya,

we have been playing with the following weapons ranges for quite some time and are very pleased with the results, generally:

rifles 7, assault rifles 6, carbines 3 to 5 depending on type (e.g. US M1 carbine is 3, Mauser 7.xx mm bolt action type carbines 5), leg LMG 12 to 14, leg MMG 18, vehicle mounted MMG 24, heavy MMG 30 to 36 depending on caliber, SMGs are 2 or 3 depending on type (the US .45cal ACP weapons are 2).

HE kill on bolt action rifles reduced to zero, semi-auto rifles have HE kill of 1.

Grenade HE kill doubled and quantity halved (simulates more grenades thrown at once and we never got to use 'em all anyway. lol)

the benefits are:

1. faster play due to reduced spurious op fire at max ranges for rifles.
2. rifle lethality (which, in our humble opinion, is presently way too high) is toned down. it seems as if attenuation is basically a linear function of range so a rifle with a max range of 7 "kills" less at range 5 than a rifle with range 10 does.
3. makes grenades a more realistically effective close-in weapon

why we did it:

a. it was very rare for rifle firefights to exceed ranges of 350 yds/meters. this was why the assault rifle was invented in the first place! the added range from conventional cartridges was not needed, the recoil prevented accurate full auto fire (try an M-14 sometime!) and the "short" rounds weigh less which increased individual ammo loads. what a concept!
b. reduced casualty rates from rifle fire. the big casualty producers were fragmentation weapons (arty, mortars) followed by MG and trailed (by a LARGE margin) by rifles. in this regard we also upped arty effectiveness to 150 and infantry toughness to 130, both of which seem to achieve the desired objectives.
c. increased emphasis on maneuver rather than annihilation, especially placement of MGs and light mortars.(we also set "search" to 70 which further emphasizes maneuver.)
d. greatly discourages "bunching up" of infantry as that presents really juicy targets for arty and mortars (upped to 150 remember.)
e. rifle squad's rifle fire more restricted to the unit's nearer front; less of this 360 degree spinning to bring everything in range that moves in one turn under fire. (the SAW gets fewer "shots" than the rifles so it takes less "pinning" of the SAW equipped squad to enable maneuver.)
f. enhances the importance of the SAW (LMG, Bren, BAR) better emulating actual tactical doctrine. "rifle only" squads have a tough

time which is as it should be.
g. increased survivability of MGs (size 1) especially under conditions of reduced visibility.

we did not touch vehicle vs. vehicle fire or defense (tanks, assault guns, AT guns) as we felt it would be impossible to improve it! the current model is very, very good indeed. we have tabled the aircraft/AAA model tweaking until we see what version 7 brings.

take a couple of nations, make the mobhack tweaks and give it a try. if you encounter different results or have further enhancement suggestions please let me know. email = vvondrasek"at"yahoo.com.

note: doing all the oobs is a lot of work as you have to change EVERY weapons table. so, restrict your test to nations you use frequently and SAVE the original oob should you wish to return to it.

best,
vic

PS: know those "warning" notices about alcohol (effects on pregnancy etc.)? a sign seem at a bar/tavern ("The Paper Doll" tell Dave the bartender Vic said hi) in Charlotte NC, USA:

"Warning! consumption of alcohol" [i was ho-hum at this point being impervious to warnings] "can lead one to believe one has mystical kung fu powers resulting in getting one's ass kicked." :)

chuck151151 replies:

Date: Thu Jun 10, 2004 3:09 am

Hi guys Firstly much profuse apologies and groveling for being a wettish blanket but I feel compelled to make some points.

The rifles, LMGs,MMGs,HMG, all fire the same round, a rimmed 7.62, 7.92 or something similar(there are some exceptions of course). This round can still do considerable damage out to about a kilometer. so the ranges of the various weapons is determined by there sights and supports rather than their round. Now most people, given a good instructor and a couple of days on the rifle range can hit a man-sized target out at 500 m with pretty good accuracy. So it seems to me a bit mean to limit the weapon to 350 mts. I imagine 10 prone riflemen that can shoot can put out quite a scary volume of fire quite a way.

The oft quoted firefights occur at such and such a range is, I think the result of reduced visibility from fighting in close country or on a battlefield closed in by smoke etc, not a limitation on the accuracy of the weapons, if your section can see the enemy at 500m they certainly aren't going to hold back because its 'rare' and I'm sure the guys on the receiving end will consider it more than 'spurious'

Grenades hit point doubling I suggest will move you back in the

direction of 'annihilation' it would make close encounters a bit deadly me thinks. Not so sure about the grenade volley effect anyway.

The combination of reduced rifle range and more effective artillery could make playing as the early war, low morale, low experience, Italian, Romanian, Bulgarian(this is where the sections lacking LMGs exist) etc infantry battalion virtually impossible. If these units are not 'bunched up' you've usually lost.

But then again I must admit I have not tried it.
Thanks for your time Chuck.

Vic replies:

Date: Thu Jun 10, 2004 5:19 am

--- In SPWW2@yahoogroups.com, "chuck151151" <chuck151151@y...> wrote:
[annotated]

> Hi guys Firstly much profuse apologies and groveling for being a
> wettish blanket but I feel compelled to make some points.

no problem! i post to draw a reaction to see if i am missing anything. the really neat part of the game is it can be tweaked via mobhack in a meaningful way. if i can't defend this rationally it probably isn't right.

> The rifles, LMGs,MMGs,HMG, all fire the same round, a rimmed 7.62,
> 7.92 or something similar(there are some exceptions of course). This
> round can still do considerable damage out to about a kilometer. so
> the ranges of the various weapons is determined by there sights and
> supports rather than their round. Now most people, given a good
> instructor and a couple of days on the rifle range can hit a man-
sized
> target out at 500 m with pretty good accuracy.

yup, on a range, a man-sized target standing upright and motionless, not prone or moving low and with nobody shooting at the firers and without moving themselves and no incoming and....etc. it's volume of fire that tells and rifles (especially bolt action types) just don't put out enough volume. this is precisely why they aren't around anymore. even the venerable semi-auto Garand has been retired since the 60's. in addition the MG is far more stable either tripod or bipod mounted.

think about this: a deer is a BIG animal. a shot at a moving (not even running) deer over open sights at 500 yards is a very, very tough shot. even guys who use scoped rifles wait for motionless shots.

So it seems to me a bit
> mean to limit the weapon to 350 mts.

it's not the cartridge or the weapon being limited to 350 so much as it is the shooter/weapon combination, the "weapons system" if you

will. a combat infantryman with his nose in the dirt has enough trouble seeing things within 200 yards much less 500. to see 500 yards clearly you often must expose yourself, not healthy so infantrymen don't do it. 500 y/m is sniper range stuff and over open sights in combat conditions it's a hope-and-a-prayer shot. we have no trouble with the range on sniper rifles employing the same cartridge because it's a scoped rifle with a highly trained marksman who is concealed picks his shot, not under fire etc.

I imagine 10 prone riflemen that
> can shoot can put out quite a scary volume of fire quite a way.
>

figure about 10 reasonably well aimed shots per minute per rifleman (this includes the typical 5 round stripper clip reloads) x 10 riflemen gets you 100 rounds per minute per squad. this MAY be able to be sustained for a few minutes. e.g. if you've ready access to 100 rounds (20 clips) you've got 10 minutes worth. this approximates a "unit of fire" (one DAY'S ammo) for rifles. [a game turn IIRC is on the order of a few minutes (3? 5?)]. so it seems as if riflemen are firing too often, too far and to far too much effect. compare the 100 rpm max rate to either cyclic or sustained ROFs of MGs, usually in the 500-800 rpm range. [when riflemen carry extra ammo it's usually belts of ammo for the MG. they know what side of the bread the butter is on. :)]

> The oft quoted firefights occur at such and such a range is, I
think
> the result of reduced visibility from fighting in close country or
on
> a battlefield closed in by smoke etc, not a limitation on the
accuracy
> of the weapons, if your section can see the enemy at 500m they
> certainly aren't going to hold back because its 'rare' and I'm sure
the
> guys on the receiving end will consider it more than 'spurious'

the problem is not just "seeing them", it's seeing them sufficiently well to shoot accurately at 500 yards. they're doing their damnedest NOT to be seen. so you may get a glimpse of movement but they're not going to stand up and wave so you can squeeze off a few. further, should you fire a few rounds of oh-what-the-hell rifle fire and get a hail of MG bullets in return you soon learn to be more target selective.

if spww2 squads "looked to their front" 500 might be OK (assuming greater attenuation at extreme range). in the game the rifle squads function exactly like the turret on a tank changing front instantly over 360 degrees with all rifles in the squad capable of fire in every direction. (including through adjacent friendly squads. one just can't flank these guys!) infantry squads set up to provide an arc of fire that interlocks with those of adjacent squads. positioning a squad for all-round defense greatly reduces the firepower available in any one direction.

further a 10 man spww2 squad with rifles and a LMG get a "bonus" 3 rifles or a 40+% rifle firepower boost as the 3 LMG crewmen are all presumed to be firing rifles at the same time they are servicing the LMG. this was the primary reason we dropped the HE kill on rifles to zero. even at zero the rifles still inflict casualties, just fewer.

one reason we reduced "search" to 70 is that infantry is TOO visible with it set to 100. open terrain in the game is essentially parking lot open. real terrain, even open type, generally provides enough cover/defilade for partial concealment at least. with search at 100 even squads moving slowly frequently draw fire at max rifle range = 10.

> Grenades hit point doubling [note: HE kill is doubled, not accuracy] I suggest will move you back in the
> direction of 'annihilation' it would make close encounters a bit
> deadly me thinks. Not so sure about the grenade volley effect anyway.
>

try it. the problem is squads don't throw one HG at a time they throw several. before, the HG was essentially a noisemaker. not so this way. you're going to be very careful about moving adjacent to enemy units. it also makes play in urban/built up areas or heavy jungle the nasty stuff it was. [also remember to set infantry toughness to 130. this tones down the HGs as well as the rifles i believe.]

===>the goal is to get a higher PERCENTAGE of casualties from fragmentation weapons and MGs and to reduce lethality generally. <===

> The combination of reduced rifle range and more effective artillery
> could make playing as the early war, low morale, low experience,
> Italian, Romanian, Bulgarian(this is where the sections lacking LMGs
> exist) etc infantry battalion virtually impossible. If these units are
> not 'bunched up' you've usually lost.
>
in these contests the indirect fire weapons and MMGs and HMGs become critically important as was true of the actual combat. riflemen bunching up in the presence of MGs isn't healthy either, witness WWI. and yeah, these guys are going to have a tough time against better equipped units which probably means a cost adjustment. we did a Spanish civil war test (nothing but grenades and rifles in the squads) and found that mortars and MGs became "objectives" in themselves.

> But then again I must admit I have not tried it.

Hope you do try it as i am seeking all the info i can get!

> Thanks for your time Chuck.
>
Thanks for questioning my approach!

Best, vic

chuck151151 replies

Date: Thu Jun 10, 2004 9:16 pm

And now for the CB ;)

>>it's volume of fire that tells <<

Rifleman are not trained to put out a 'volume' of fire (that is, as we agree the role of automatic weapons) he is trained to mark his target and hit it. In a defensive position(rifles are pretty stable in the prone position), he is very hard to see even after firing. You are running form cover to cover carrying say 20 30 k(hope that you aren't carrying a mine or tripod) every minute or so you have to get up again run a few meters and hit the dirt again. You are getting very tired and slowing down, He knows where you last went to ground and is waiting for you to break cover. He just needs the one bullet.

And of course he needs to do this under combat conditions, and this is what he is trained to do. Though of course he may not in fact be receiving any return fire. Turkey shoots happen just as do the type of firefights described below.

>>a combat infantryman with his nose in the dirt has enough
  trouble seeing things within 200 yards much less 500<<

This is modeled in the game as increased suppression.
Also
I can think of some places he can see 500m, large parts of the desert are pretty flat and featureless, probably parts off Russia as well. Also if he is higher than you he can have a pretty good field of fire (the cover of a fold in the ground disappears), and lastly if your padding across that river or on ice, marsh or paddy field. In these situations Riflemen especially in a prepared position(i.e. not exposed)
could easily and justifiable put there 10 range to good use.

<<a squad for all-round defense greatly reduces the firepower available in any one direction<<

An argument against the grenade volley effect? also I imagine there are circumstances when the squad doesn't throw there grenades in a volley, It is hard to throw one any great distance they are certainly pretty weighty.

Thanks Chuck

Little Aberdeen Report - For mountain and jungle/swamp terrain forces

Date: Tue Jul 6, 2004 2:42 pm

hiya,

the R & D boys were reviewing v7 and noted (with no little admiration) the new mountain unit classes. one of the guys said "it's a shame we can't get resupply to these troops when they're in the s*** (impassable terrain); wheeled and tracked vehicles can't get past it."

another R & D guru piped up "we'll just air supply!"

"yeah" said another, "but what if there's no air available?"

well, it was 17:00 and time to go home but the crew stuck around and solved the problem. the answer is:

The brand new "Pack Mule Munitions Carrier"!!

would you like to have this unit?

here's how you build one:

1. take an existing pack mule transport unit and copy it to an empty unit slot (which we now have more of thanks to spcamo)

2. change the unit class to 56, ammo carrier
3. set the number of men equal to 6 (weaponry at your pleasure)
4. leave (land) speed at 7 BUT set swim speed to 1 (this way they can handle water too, albeit at very slow speed.)
5. cost? well the R & D boys suggest 36; mules are slower than vehicles but they go anywhere and with a crew of 6 (mule handlers and a few guys to help unload the ammo) they won't get wiped out by one arty hit (probably).
6. here's the biggy; set the MOVE CLASS to 01 "UNKNOWN". if you don't they'll look like mules but move (and sound) like trucks.

so now you have ammo resupply "vehicles" with 4HD (four hoof drive). they are useful for:

a. mountainous terrain
b. jungle/swamp terrain (even handle small bodies of water)
c. heavily forested areas
d. accompanying light mortar units to forward areas where road-bound units might get hammered. we attach 'em as part of the weapons company/platoon formation.

as soon as we finish designing mule parachute harnesses we'll tell you about air deliverable munitions pack mules. :)

for the GE armor fans we're also working on the PanzerKampfmule I Auf A. [a problem there now as they have a tendency to drink gasoline instead of eating hay and the GE's never have enough gas!.]

let me know if you have a problem.

best,
vic

David Auner added to Troopies comment:

Re: Little Aberdeen Report - Glider-born Mules

Date: Wed Jul 14, 2004 8:31 am

At 16:49 14.07.2004, you wrote:

>If you give the mules a little shumba, they'll be less
>suppressed after they jump. But then you'll have a
>gaggle of drunken mules.
>
>troopie

Talking of mules a little story my grandpa told me crossed my mind. A couple weeks after being air transported with the third wave of the 5th Gebirgsjaeger into Malemes airfield in Crete my grandpa's squad was on its way to some kind mission further inland. Since he and all the people in his squad were a radio operators, they, sometimes, managed acquired some mules to help them carry the stuff. For us folks now, the weight of the radios back is hardly imaginable. The radio itself weighed a whopping 20kgs with an additional 19kgs of batteries. With three man per radio you could shift the weight, so one man could relax a little while the other two served as beasts burden. Additionally, you had to carry your own combat gear. Well, the Feldwebel, being an a**, refused to wear any radio equipment so my grandpa and the third had to wear, which made them get the mule pretty quick.
Mules in particular gave them a pretty hard time, but this beast was amazingly stubborn, even for a mule. It refused to take any step if anyone walked in front of, so you had to take the reign and walk behind or besides the beast. So, for a while it went pretty well and they could relax a little. But some time into the mission they had to cross an approx 5 to 10 or maybe 15 meters of solid, bare rock. So guess what? The mule refused to cross the rock. So very reluctantly, the men took their baggage off the mule and onto their backs once again. When their mission was finished after a few days, they returned towards camp by the very some footpath. When they at last came to the final bend before the rock they saw, to their amazement the stubborn mule still standing there. they were happy to unload their load onto the mules back once more.
This is not the sole story I've heard about the stubbornness of mules during my years of life, but it is the one I can remember in full detail. In case you guys want any more, I guess I'll ask my grandpa to tell the other ones once more.

Cheers, Dave

Little Aberdeen Report - Modeling Beach Assaults I - The AK

Date: Mon Aug 9, 2004 8:06 pm

Howdy there,
we we're reading (again) histories of USMC and other amphib assaults
and came up with an idea you may find useful.

in SPWW2 beach assault units are all provided with landing craft, i.e. all of your units are boarded on the craft that will take them to the beach. this is an eminently practical solution for the game but leaves an element of realism absent. landing craft were at a premium in all theaters, a shortage that was present even at the end of the conflict. [in particular there were never nearly enough of the Amtraks (LVTs) that could venture beyond the ocean shoreline.] this shortage meant that an entire attack force could not be sent beach ward simultaneously but rather had to be "shuttled" by landing craft making several trips each. this meant it took time to get all the assault and support units on the beach leaving the initial wave (s) somewhat vulnerable.

troops normally disembarked from attack transports (USN designation "AK" or "AKN" for net cargo ships) onto the landing craft for the trip to shore.

we model this by creating our own AKs stuffed with troops/units and circled by landing craft ready to pick up passengers and head for the beach.

how to build an AK:

1. at a reasonable distance from the shore create level one land hexes in three rows perpendicular to the shoreline. make the center row 4 or 5 hexes long and the outside rows one shorter (3 or 4). size depends how many units you want on 'em. this means they are NOT necessarily to scale but what the heck. cover these land hexes with the parking lot tile and you'll have a nice little navy gray sorta boat shaped "island" which will represent your AK. (AKs typically had number and names. e.g. AK-227 Boulder Victory. you can read more about AKs here:

http://www.navsource.org/archives/09/13idx.htm

APs were the larger "long haul" transports.

there were also APDs which were destroyer transports of obviously limited capacity compared to their larger brethren. these performed yeoman service at Guadalcanal

2. load your AK with troops. the landing craft can go to the depth -1 hexes and the troops can embark.

3. the troops will really be packed on the AK (realistic) and undoubtedly uncomfortable but that's their problem [make a nice large comfy one for the A0 (you) and relax, maybe knock back a drink or two. you can head for the beach when it's nice and safe]. if you're worried about fire from shore chewing up the guys on the AKs simply make the "bow" (landward hex) a level 2 and the guys can shelter behind that.

4. other spiffy stuff:
a. one of the problems with beach assaults in the classic game application is no FOs (naval gunfire control etc.) to call pre-landing fire. they are incapable of use until they beach if in a LC.

we usually get around that by creating an Amtrack or LCM FO unit but with the AKs you can stick a regular FO (the level 2 hex at the "bow" is a good spot) to call fire while the boats approach the beach.

b. these AKs are obviously going to be impossible to "sink" but they make jim dandy targets for aircraft, sitting out there as they do on all that flat water and packed with troops. you can arm them for this contingency. historically, typical armament would be something like one 5"/38, one 3" DP, 40mm (2 or 4) and 20mm (4-6) AA. but use your own judgment

as an aside, we also now build direct fire "destroyers" this way too armed with 5" and AA which is handy for air defense if you don't want to jam more units on the AKs. (the concrete "gun" pillbox makes a tolerable destroyer gun turret icon to replace the default icon). these "destroyers" are immobile but we live with that.(Hint: have your destroyers face the beach broadside and make them smaller than the AKs.) 3, 4, or 5 5"/38 turrets per destroyer (depends on class) is about right. if you give the defenders some decent shore based arty
you can get some pretty lively ship to shore (and vice versa) firefights going. armor the DD turrets as you see fit but don't overdo it. we also tend to limit their ammo as they can be pretty potent.

c. limit your landing craft to anywhere from a third to a half of what you would normally receive.

d. clearly your ersatz AK is going to be part of the terrain so save the map for modification for future tussles.

when used in human vs. human contests this approach makes the beach attacker vulnerable to counter attacks if he is tardy in getting all his assets on the beach promptly. it also provides the defender an additional incentive to go after the landing craft. be reasonable about giving the attacker enough time (turns) as he will be at a relative disadvantage vis-a-vis the typical contest. we did a little Okinawa-like battle with PLENTY of defender air (modeling the kamikaze attacks) and it was pretty hairy.

give it a try and see if you like it.

best,
vic

Little Aberdeen Report - Force organization I - The independent Co HQ

Date: Thu Aug 19, 2004 12:48 am
hiya,

we've started doing something that has proved beneficial and you may wish to try it. after purchasing your core, buy an additional company

and delete all the formations attached leaving only the HQ (?0) unit/group. this leaves you with a company command unit with no formations attached.

we use this company HQ to command task groups formed by attaching core and/or suplementally purchased formations via the cross-attach feature. as it is part of your core it gains experience and skill (arty spotting etc.) and over time will be far superior to a company HQ you purchase as a supplement.

if the HQ platoon structure is something like inf, MG, lt mortar, you can upgrade it to something else say inf, engineer, MG. if you're in a scenario where you get very minimal purchase points use them as HQ security or some other small task appropriate to the type of units you have.

if they are paras another idea is to upgrade them to size 0 units, (say e.g. scout, scout, sniper or scout, scout, FO) and, if you're not going to attach other formations to them, drop them under the cover of smoke in the bad guys' rear area. [of course if done in a human/human game your opponent is gonna wonder why you're dropping smoke in his rear area and may start moving security in that direction.] they make spiffy (and stealthy) arty spotters and generally good intelligence gatherers.

you don't want them shot up as losing them means building experience all over again. just let 'em hide out in cover and call fire on enemy mortars, flak positions, etc. if they move it should be low and slow (in cover if possible) with the arty-call capable unit trailing. (you don't want to lose that one!) firing non-LOS'd CB at on-board smoke plumes is generally a waste of time but with these guys around to spot you can do some real damage. knocking out mortar positions not only gets you points but it saves your own guys grief and casualties. these ersatz LRPs are harder than hades to spot especially if they don't fire; we routinely turn the guns off so they don't unintentionally op fire and blow their cover. they're not there to shoot.

paras are a good choice for an infantry command as, if you wish to employ paras, you already have an jump-capable, experienced CO (OC for my UK friends) around which a custom designed force can be built by adding the appropriate platoons of whatever composition you wish and attach them to the HQ via the cross-attach feature. voila, independent, well led and custom designed para force.

if the CO (?0 unit) gets knocked off, upgrade it to an FO and later (assuming he survives) a non-FO. you will have a CO that has a high level of arty skill without the high cost of an FO as his command skill set will remain after the change (you'll lose some experience though).

of course you can do the same with an armor company or armored car company. if you don't get enough points to buy tank/AC platoons just employ them as an independent tank/scout section.

we do a fair amount of this kind of thing in human/human games too. many pbemers adhere to the buy-only-full-companies-off-the-menu rule

but we think part of the fun is buying and organizing our force to suit the task. the added benefit is the opponent has a less clear picture of your force composition. e.g. if he sees a tank platoon he cannot automatically assume that it is part of a default tank company and hence guess pretty accurately at what other units you have that he can't see.

try it, you may like it.

very best regards,
vic

Little Aberdeen Report: a thought for GE "long campaigners"

Date: Thu Jul 7, 2005 6:15 pm

hiya,

fighting the WWII campaign as the GE side is a fairly popular pastime. the problem is (especially if you are careful about casualties) your core force builds experience and capability through more powerful weapons. given that the AI force size is a function of your force, this leads to large "force values" which results in you facing literal hordes of enemy as time passes. try minimizing your force value by using these tricks:

1. "upgrade" to less capable units; e.g. replace those tracked ammo carriers or wheeled/tracked transports with horse drawn types (this models fuel/equipment shortages as the war progresses). better yet "lose" the ammo supply units.
2. don't be in a big hurry to get the "latest and greatest" equipment available; one of the big complaints was that newly constituted units got the newest equipment while some veteran units struggled on with the older stuff (e.g. MG 42s vs the 34s).
3. if you have the purchase points available "upgrade" units to the same unit type. this knocks 5 points off the unit experience and reduces overall value. (e.g. do you really NEED all those "elite" infantry squads? models less well trained replacements, squads that have heavy casualties but aren't destroyed don't lose experience.)
4. get some "captured" allied equipment; try some of those Shermans against T34-85's (hint: they ain't panthers!)
5. replace some AFVs in Pz companies with SP FlaK to model defense against increasing allied air superiority
6. replace an off map arty unit with a FO and the on map FO with a regular vehicle/leg unit; the on map vehicle will still have a high arty rating but a much lower cost (models ammo shortages, less well trained FOs.)
7. fewer tanks (especially panthers, tigers) and more StuG/Hs and SPAT.
8. replace some SPAT with towed AT
9. stick with 2 MG units rather than upgrading to the 3 MG "groups"
10. replace your elite types (e.g FJg, Geb) with regular types (models loss of irreplaceable specialists.)

i try to pick a max force value of "n" points (say late '42 to

early '43) and try to hold that level for the balance of the campaign.

warning: this process leads to increased cursing of the supply echelon and increased beer consumption (not necessarily a bad thing!) and makes the purchase/upgrade process a little more interesting.

try, maybe you like?

all the best,
vic

Little Aberdeen Report - The Spec Ops Company

Date: Sat Aug 27, 2005 3:05 pm

hey there,

the unit re-assignment and platoon cross-attach features make creation of specialized organizations easy and fun. one we have developed has proved particularly useful. developed primarily for long campaigns it can also be helpful in human vs. human games. it's an all para unit and while we don't typically employ paras on a larger scale they can come in handy on occasion.

organization:
1. Co. HQ squad
2. Rifle platoon (3 or 4 squads)
3. Weapons platoon (1 x MG section + 1 x mortar section)
4. Engineer platoon (1 or 2 x Eng squads w/smg and charges + 1 x LMG squad + 1 x inf AT [bazooka, faust etc.])

the primary role of this company is the seizure of those deep objective hexes that can be tough to reach overland. terrain can make the going slow and the threat of groups of 2-man inf AT teams (a favorite of the AI) make things problematic for HTs or ACs zipping around unsupported in the enemy rear area. [the company was initially developed in USMC vs. JPN campaigns because of slow movement/soggy terrain constraints in a jungle environment.] the weapons platoon provides the punch needed to handle rear area flak emplacements. the engineers can clear mines and deal with bunkers with their LMG as fire support.

use:
1. typically used mid to late game if air delivered
2. arty "hot spots" should be placed during the deployment phase to the REAR of deep objective hexes. delays on air drops usually run about 7 turns so thoughtfully placed "hot spots" greatly reduce the delay in getting the boys on stage.
3. screen the DZ with smoke to cut down on losses to flak
4. lead with empty air transports to soak up flak
5. send 'em in

training:
use with caution early in the campaign. let 'em get some easy kills against stragglers (or prisoners if the Geneva convention man isn't

around) to build their experience. 5 kills seems to be the magic number for experience gains.

other uses:
since air isn't always available you can:
1. buy 'em some HTs and you have a nice mobile and potent infantry reserve
2. buy a couple of infantry platoons to attach to make it a full sized infantry company with a good heavy weapons allotment (an additional inf AT platoon wouldn't hurt)
3. use them as "palace guards" [one format we play in human vs. human games is "kill the HQ". objective hexes mean nothing, you win by knocking off the opponents A0 unit. i once had my spec ops company land on my opponents HQ in one of these games! i had the six-pack in record time.]

notes:
the four squad inf platoon seems to work a bit better. it can be split into two 2-squad sections for independent advance and overwatch. likewise the two engineer squad engineer platoon is also favored as drop losses do occur. any time you don't have an engineer squad you're sure to need one. the opinion here is that para units are over priced for long campaigning but since the company only has a dozen or so units the impact (especially with a large core force) isn't that bad. if you're into para ops in a big way you just need to add a couple of para platoons and you have a para company with a high experience HQ to throw at the bad guys. given the way the retreat scheme works (home map edge) you want a CO who can rally units well.

give it a try!

best,
vic

Little Aberdeen Report - unit of the month - StuG

Date: Sat Aug 27, 2005 4:47 pm

hiya,

one of the very best units in all of SPWW2 is the venerable GE StuG. it comes in a variety of flavors and is a very potent and cost effective weapon. other nations have AG class units but few compare with the StuG's combination of armor, firepower, mobility ammo load out and low, low discount price.

research has shown that the most effective organization appears to be a three vehicle platoon as follows:
1. 1 x SP gun class StuH/105 (the one with the 8 HEAT rounds). this one is the infantry crusher with the 8 HEAT rounds providing just enough AT capability.
2. 1 x AG class StuG. this is the multi-purpose unit good against infantry and armor
3. 1 x TD class StuG. this one is there to provide protection against any enemy armor that may be prowling around. it has less HE but it's

load out includes generous AP, HEAT and sabot rounds; good against pretty much anything on wheels or tracks.

employment:

the StuH should be the platoon "0" unit as it typically does not lead. (an exception would be nosing out suppressed infantry at close range.) it should remain slightly rearward to overwatch and deal with infantry and also be in position to call indirect arty support as "0" units always can. i try to limit StuH AT fire to opfire unless the StuH gets in a bind and has to shoot its way out.

the TD StuG should overwatch in an AT role while the AG StuG leads, typically with infantry mounted.

good against even most Russian heavy armor, the StuGs are absolute murder against other allied AFVs (e.g. Sherman etc.) at far lower cost
than say tigers or panthers. the StuG may be the all-time leader in bang for the buck. it's tempting to buy those tigers and panthers but the added cost means just that many more JSU's you're going to be looking at.

the company organization favored is the 10 unit StuG company with a HQ vehicle (here you might want to try the SPA StuH/105 version for the HQ unit with no HEAT but more HE and indirect fie capability) and three platoons of 3 vehicles each as described above. one of these 10 unit companies per infantry battalion (3 inf coys + weapon coy) works very well providing excellent fire support and terrific AT potential.

a StuG platoon assigned to an advancing inf coy (two up, one back) will have the StuH carrying the inf coy MG unit (MMGs being slow in SPWW2) in the company of the reserve infantry platoon and one of the StuGs with each of the lead inf platoons.

if the one up two back advance is preferred, have the AG class StuG with the lead inf platoon. three unit StuG platoons with the three squad sturm pioneer platoons mounted make formidable assault teams. [in assault scenarios the addition of one sPnr platoon per infantry coy is SOP here.] compare the cost of a StuG plus a pioneer platoon to a mine clearing tank.

in long campaigns i typically use near-max size cores that are infantry heavy. i like to have only a medium tank HQ section (HQ tank plus another tank) in my core. i buy tank platoons to attach to this HQ section as purchase points permit. however, i always have two of the StuG coys described above as part of my core force. depending upon visibility, mission etc. supplemental attachments to the StuG company can include inf, pnr, SPAT guns or SP FlaK.

in one long campaign i dispensed with tanks entirely and used a StuG Bn (3 coys as above plus 2 HQ SPA class StuHs and some tracked ammo carriers as StuG HE ammo load out is not on a par with tanks). one company was placed with each of my two infantry Bns and one was kept in reserve. i built a 10 squad sPnr coy (HQ + 3 plt x 3 sqds) as riders for the reserve company.

if your campaign begins in the pre-StuG era, form the organizations using PzIV CS types (e.g. PzIVb which appears to be the best of the type.):
1. buy a medium (CS) company
2. delete the attached tank platoons
3. buy a two-tank CS section
4. buy a four-tank CS platoon
3. buy a two-tank CS section

on deployment reassign:
a. the HQ section second tank to the first two-tank section
b. the fourth tank in the four-tank platoon to the second two-tank section

et voila, HQ tank and three platoons of three each that look good on the HQ screen. as StuGs become available upgrade the PzIV's to StuGs and you've got it knocked.

The StuG IVs are good because of larger ammo load out and better frontal (at the expense of side) armor; i don't buy them however as i don't think they LOOK as good as the IIIg's (especially with a nice metal flake paint job <G>). plus once you get to the IIIg's ('43) you're not going to have to spend points on upgrades for the rest of the campaign! and, if you're real careful (or real good), you won't spend much on repairs either.

enjoy!

best,
vic

Little Aberdeen Report - Employment of Mortars

Date: Sun Aug 28, 2005 10:04 am

see how busy i am?

1. Intro

mortars were terrific casualty producers in WW2. artillery and mortars (especially heavy mortars of the 100+mm class) could and did break up attacks on their own. that is unlikely to happen in SPWW2 as the lethality balance favors direct fire (DF) weaponry at the expense of indirect fire (IF) weapons. i whined about this (especially the accuracy component) a lot. in retrospect however it may be that this aids playability by emphasizing fire and maneuver; else the game might degenerate into an mortar/artillery duel. at any rate it's the way it is so one must use to learn the tool as it exists.

truly effective mortars (say 80mm and up) were typically found in the Bn heavy weapons company along with MGs and assorted other goodies. the MGs etc. were usually distributed to the line companies for DF support. this left the inf Bn wpns coy with a light (80mm) and a

heavy (100+mm) mortar platoon as its main fire components. [the GE's were fond of the "infantry gun" as an alternative to the heavier mortars.] 6 x 80mm and 4 x 100+mm would be a representative tube count for the company. [the US army used 81mm's in the weapons coy with 3 x 60mm's attached to the line companies. the 4.2 inch "chemical mortars" were organized in independent Bn's. the US army's arty support was extremely generous and incredibly effective so mortars weren't as critical to it.] add to this transport and, if you've a mind to, ammo resupply.

SPWW2 mortar units are attractive because they are two-tube units that provide twice the punch and take up half the slots of their one-tube brethren. (the latter being important if you bump up against the 200 unit core limit in LCs.) they are also on board units so if one uses the miraculous (infinite quantities of every caliber and type) ammo carrier one can theoretically bang away on almost every turn of a scenario. [as an aside, these ammo units do compensate somewhat for the lowered mortar lethality in SPWW2, substituting quantity for accuracy.] if one uses ammo resupply units the drawback is that keeping both tubes working is somewhat problematic. the ammo reload routine replenishes weapons in slot sequence (top to bottom) so a two-tube unit that runs out of ammo in the second slot is going to have its effective rate of fire halved. (this always happens at the worst possible time.) mortar men on the empty tube will not requisition rounds from the other tube but will take a smoke break instead. do not place mortars in towns as under-utilized mortar men drift away never to return! (check the bars if they go AWOL.)

2. employment - general

SPWW2 mortars are generally suppressors not killers. opportunities may arise against the AI where one is presented with a target rich environment and a good LOS. the AI has a tendency to really mass moving infantry and on a good day can be, in relative terms, shot up smartly. this is unlikely to happen against an experienced human player. human players are typically conniving weasels that conceal their units as well as intentions to the greatest degree possible. they skulk around in woods or fire smoke screens etc. scattering mortar fire all over the map (especially with no LOS) in the hope you're going to hit something will get you nada. worse it will disclose the location of the firing units to the enemy before such units have had a chance to have a material impact. the key, as with all SPWW2 arty, is massed fires on a *worthwhile* target. having one mortar unit fire on an infantry squad here and another firing on an infantry squad there is a waste of time. so the first rule is FIND a suitable target and lay on a good volume of fire. mortars can be very effective in a DF role but if you can see the target the target can see you and mortars are el primo DF targets and will draw IF like bees to honey. in low visibility (as in within MG range) DFing mortars will not remain stationary or alive for long. (the exception here might be the infantry class mortars [non IF] that have a little zip and can move effectively.)

in general, placement of the platoon should be with units within a few hexes of each other but not adjacent or on the same hex (invites disaster). this aids movement and resupply and doesn't provide a target area that is too dense.

3. mortars in the advance/attack

fire is of two types, suppression and interdiction. suppressing fires can be IF and in certain cases area fire (AF) [aka "z key"]. suppressing fires are directed at known or (strongly) suspected points of resistance to enable approach to contact or disable/screen enemy heavy weapons (e.g AT guns). interdictory fires are laid beyond objectives to deny access by enemy reinforcing units to the objective area, roads being a favorite target here.

in SPWW2 infantry units placed where they can only be seen at a range of one hex (adjacent) are tough to displace and inflict enormous damage on units that move adjacent to them. [the AI happily places units out in the open for piecemeal destruction but the adept human player will not.] unsuppressed these defensive monsters can repel repeated attacks at great cost to the attacker. worse, attacking units are prone to "bounce" from these defenders requiring another move adjacent and more bloodletting. the mortar's job is to get enough suppression onto these buggers so that they are less lethal and an attacking unit can remain adjacent long enough to rally from suppression and inflict a little pain of its own. shooting a unit out of position with IF (especially unobserved IF) irrespective of firing caliber happens with about the same frequency as total solar eclipses in your neighborhood. even lengthy, big caliber barrages on dug in infantry produce few casualties and suppression is reduced quickly once incoming fire ceases.

unfortunately SPWW2 mortar fire scatters all over the place (even repetitions of previously observed fire subsequently unobserved) so to have an effect fires must be dense, think the whole mortar platoon (6 x 80's or 4 x 100+'s). lay the whole platoon on one hex and let fly. the scatter will lay plenty of fire on nearby hexes as well helping to suppress other baddies. sadly there are going to be "shorts" so your guys nearby will get some ouch too. it's important to have a few units within striking range of the enemy unit so suppressing one of your own units will not scotch the attack entirely. sometimes one gets lucky and one turn of prep fire does the trick, usually it's two or three.

naturally the opponent will want to fire his mortars in defense. suppressing these (arty off board is best, on board is OK) will help keep your attacking guys in the pink.

4. mortars in the defense

it's best to stick with interdictory fires here. the opponent will be laying mortar fire on you and close defensive fires on your part will provide enough "shorts" landing on your troops to perhaps tip the balance the enemy's way. plot fires no closer than 3 to 4 hexes (maybe 2 for exceptionally gifted mortar squads) from your own units. if his IF dings your units up, your interdictory fires may prevent him from following up closely enough or in enough strength. your "shorts" will land on his forward most units. pay careful attention to the experience and arty ratings of your units. the higher the ratings the closer you can plot to your own lines. also look for ANY LOS to a hex near attacking units, even vacant hexes are

good. LOS reduces scatter and greatly enhances suppression and lethality; remember, to get you out of your defensive position he's got to be moving eventually and moving under fire in SPWW2 carries a high price. [the name of the game infantry-wise in SPWW2 is to be stationary when getting shot at and be shooting at the other guy when he's moving. if you do this consistently you will be very hard to beat.]

on defense it's not so much killing as keeping the enemy from closing rapidly enough to exploit any suppression he inflicts. in this respect fire should be spread over a span of hexes, say three to five, to cover alternative routes of approach.

5. moving mortars

you gotta do it for reasons that should be obvious from the above. in the attack mortars should open fire on an objective from a NEW location else they're just going to be suppressed by the opponents CB fire. firing from a new location will allow you a few turns of fire before you can be located and CB fire called in. some players love to park ammo wagons next to stationary mortars so they can bang away endlessly. this might work against the AI, but even the AI shoots back eventually and you lose a pricey ammo wagon. (likewise don't keep transport parked too close either.) logically enough in the (successful) attack shorter range mortars usually move up and conversely on defense, back or laterally.

there's a good way to move mortars if using ammo wagons. [i dislike the stationary ammo units as you are pegged to their locale.] set your mortars up with ammo wagons adjacent. fire for a few turns; how many depends upon your opponents reaction time. then move the ammo wagons (or trucks, whatever) to a new location roughly within transport range (more if your opponent is wise to this). keep firing the mortars until they receive CB or run low on ammo (don't run them completely out.) then move the mortars TO the ammo (or they meet at a point between) and turn the tubes off (red). they will resupply at the new location at which the enemy will have to guess. (try not to be too obvious.) while resupplying they can be plotted (but won't fire). once the tubes are reloaded turn 'em back on and you can fire with minimal delay. start firing, leave the wagons there a few turns and repeat the whole process. you get some downtime this way but greatly reduce the chance of your ammo units getting popped. it's not necessary, and it's downright expensive, to have one ammo unit for every mortar unit. 1 ammo/2 mortar units is OK, 2/3 is lavish supply. you've got to move them anyway and they can't fire when moving or loaded. when away from one mortar platoon the ammo unit can be resupplying another.

try not to move your mortars to hexes that were occupied by mortars earlier in the game (duh!). the AI in particular likes to shoot up previously targeted hexes and a human player just might get lucky enough to be "late" right on time. sometimes switching the mortars off and letting the smoke clear gives the impression that the mortars have moved and you can open up again later (briefly) after resupply. don't go to the well too often on this one though against a careful opponent. e.g. i keep notes on enemy mortar emplacement and try to pick up patterns of movement and deduce new firing points. mortars

and ammo wagons are good kills points-wise and reduce your own suffering. it's very self-satisfying to have a nice big HE concentration waiting for the enemy mortars when they arrive at a new firing point.

an alternative to resupply units is to simply mobhack your units with a more generous ammo allotment, at a correspondingly higher unit cost. this is more fair against the AI which doesn't use resupply and suffers accordingly in longer scenarios.

6. summary

1. the platoon to be in communication but not overly concentrated
2. shoot and scoot creatively
3. concentrate fire on points of attack or interdict enemy reinforcement of your objective area
4. deny the enemy routes of attack to his objective area
5. suppress enemy mortars to the greatest extent possible

best,
vic

Little Aberdeen Report - Mining for Fun and Profit

Date: Thu Sep 1, 2005 4:30 pm

hiya,

i use mines a lot as i dislike meeting engagements in human/human games. i feel it makes a better game if one player is forced to be the aggressor. in meeting engagements (especially involving careful players) there's too much dancing around and a lot of draws. you can use SPWW2 mines with a perfectly clear conscience as there is no post-combat farming or other civilian use of the terrain (AFAIK). here are some thoughts you may find useful. [sorry about the long post.]

mine placements come in five basic types (sometimes used in combination), in no particular order:
1. area denial
2. barrier/tripwire
3. nuisance
4. positional defense
5. trap

the salient point to remember in all placements is that mines, or the approaches to them, must be covered by fire; either works but both is better. mines not covered by IF, DF or AF (indirect, direct or area/z key) are basically useless with the exception of nuisance mines. mines offer a one or two turn delay at best unless placed in large numbers in one hex (multiple mines).

1. area denial - used to keep the bad guys out of an area (e.g. flank protection or concealed approaches) and/or force movement to killing zones. a good configuration (especially against the AI) is a triangle with the point toward the enemy. e.g. placed in and in front of a

wooded area it will divert vehicles to adjacent open areas covered by AT. these minefields are occasionally difficult to cover with DF (obscured view) so an arty registration point near the triangle's leading apex is helpful. these must be laid in mass to be effective; think 15 adjacent hexes at least, 21 is better, 28 superior.

another beauty use in this class involves placing a row of mines in those east/west tree lines separating open areas. kinda keeps the "ducks on the pond" denying cover to infantry and the mines must usually be cleared sequentially, in essence a very deep minefield one hex wide. indirect fire can hammer this wonderfully well as it concentrates on the forward mine.

2. barrier/tripwire - a favorite of the AI, it's a line of mines designed to impede progress. in H/H games it can provide intelligence as to enemy location. best arrangement is with AT to deny vehicle approach (mine clearing tanks, let other vehicle enter the field) and MGs (or MG bunkers which are way good for this) sited to fire along the the row AND THE ROW IN FRONT of the mines. the mines stop the infantry and the MGs chew the infantry up. the MG should be distant enough to avoid return fire from the minefield and also be covered from fire from other directions (e.g. placed behind trees, hills etc.) an MG with a FOF beginning at range 11 (one hex more than rifle fire) out to max range and a FOF width of about 6-10 hexes is ideal. MGs should have alternate firing positions to which they can displace if necessary. if not covered by fire this type placement is (other than its intelligence function) absolutely useless. lift mines from a few hexes and its value is nil. since it covers a larger lateral area it's tough to cover with IF. the AI loves to lay these in uncovered north/south lines (which are tougher to cover anyway) and they are easily breached.

3. nuisance - these are scattered mines to give enemy light vehicles pause when zipping around. used most frequently in rear areas or roads forward. rear area mines are not much use against the AI as it seldom gets to rear areas. these won't stop a human player but will slow him down some if he's penetrated with vehicles with no riders (e.g. A/Cs, light tanks, HTs).

4. positional defense - think bunkers etc. bunkers are easily smoked and
approached from outside their FOF (field of fire) and destroyed at leisure by infantry at range 1. placing mines with infantry support to cover the bunker's (or other position's) blind spots will add greatly to
the bunkers life expectancy. if well configured, reducing a position like this is work requiring smoke, HE to suppress the infantry, engineers to lift the mines etc. denying approach to the close-in blind spots can work just as well as mining the blind spots themselves.

5. trap - basically these are minefields with open corridors/areas designed to permit enemy infiltration, to a point. the enemy is permitted to advance in the corridors then met with massed fires which force retreat onto the mines. casualties can occur when retreating onto the mines or off them in a subsequent move. this can provide hours of mirth against the AI, human players are usually more careful. just make sure the open lanes are not straight E/W lines. jog the corridors around a bit. a big favorite is a couple of short lines of

mines, one behind the other running NW/SE or NE/SW across a road, even better if one end can be anchored to a building. the AI will run around the open end of the first line to get back on the road and hit the second line or will be forced back onto the first. an AT gun/tank placed behind the anchor building to cover the open end of the first line will do marvelous execution. (make sure it has ability to withdraw.) corridored mine traps also permit, albeit more circuitous, transit for friendly forces.

another good trap is the V. consider the keyboard "<" symbol. mines form the sides of the "<" (open end toward the enemy) and MGs, bunkers, whatever are placed behind the junction of the two lines. if you like throw a little N/S row a couple of hexes forward of the apexes "insurance" against penetration. this one is murder against the AI as it keeps pressing infantry forward anyway only in this configuration more infantry occupies progressively less space, kind of like FO heaven. an arty hotspot placed in the "sweet spot" between the two lines will keep the AI medics busy for days.

other thoughts:
a. don't place mines in a hex if there is an adjacent hex to which you do not have LOS (e.g. edge of hill). these are easily lifted by engineers who will occupy the "dead spot" and lift the mines. engineers can lift adjacent mines other infantry must occupy the hex. [when i first started playing SP i thought the mine clear tanks worked by literally "plowing" the minefield so I'd run them onto the mine icons, kaboom :) sometimes they wouldn't blow and the mine would be cleared and I'd curse my previous bad luck, i finally RTFM.]

b. don't mine yourself in. be especially wary of fields that will impede your ability to reinforce/move.

c. road mines are either nuisance or area denial. if using denial, use them in quantity. many (too many?) SPWW2 maps have all roads bordered with unbroken rows of trees (or trees and rough ground) on both sides. heavily mining such a road and covering it with IF turns it into the equivalent of rough terrain in terms of speed of transit. if there are open areas next to the tree lined road, cover these with DF while you IF the road. when the IF drives the villains off the road let fly. if the road runs through heavily forested areas crater the heck out of the road and adjacent hexes. i have learned (painfully) to be very wary of roads in H/H games. the AI loves to run AC types at high speed down roads at the start of its assault scenarios. mines there can save infantry and/or vehicle AT ammo.

d. city mining can be especially tricky. limited visibility makes mining problematic as covering the mines is tough. you get more mine bang for the mine buck as buildings already serve to channelize enemy vehicular traffic. unfortunately they also channelize YOUR vehicular traffic. so think about item a above. basically city mines are used to stop enemy units on a hex you want them on. for vehicles you want to tee up targets for your AT. (my all-time recorded is like a dozen tank hulks on the same hex.) for infantry you want to stop targets for MG and sniper fire. snipers placed with a LOS to a just few key hexes at ranges a little longer than ordinary rifle fire can be murder. such snipers run out of ammo before they run out of targets. i once had an entire platoon nearly destroyed by one such sniper (back in my

obstinate days). arty hotspots make good hexes for the enemy to come to rest on.

e. to defeat mines a good rule of thumb is one engineer platoon per infantry company. using engineers in mass (i.e. as an assault company) can be pretty expensive and normally that kind of engineer density isn't required. the exception would be when mines are used in conjunction with obstacles (DT) which regular infantry cannot clear. dense DTs and mines can be a trial. [DTs should placed forward to force the engineers to show up whereupon they get shot up making them less effective for mine clearance. if you place the mines before DT regular infantry can move on them forcing you to expose your firing positions. a good arrangement to deny vehicles is DT then mines then more DT. kind of a mine/DT "sandwich". good rule of thumb here is DT then 2 or 3 mines them more DT. this is "area denial" par excellence]

in general, smoke the mines and throw whatever suppressing fire (AF or IF) you can at likely defensive fire points to knock down as much of the opponent's AF as you can. the defender has the edge as he knows where you are and you have to guess at where he is. get the engineers in and lift as fast as you can.

f. mine clearing tanks/dozers are very pricey little items and high priority targets. their best use seems to be in high speed clearance of secure areas or at least clearance in areas not subject to DF. if you run into a DT/mine "sandwich" about the best response is smoke the whole mess and use the engineer tanks to breach. my most frequent opponent will occasionally conceal an engineer squad or torch in a DT/mine combination field and when the engineer tank shows up in the dense smoke, adios mine clear tank. (the same guy btw that shot the excrement out of my infantry platoon with that sniper.) we use search at 70 so these baddies are harder to spot than with search set to the default 100. one of the reasons we went to 70 from 100 search was that infantry was too easy to spot at 100; as a consequence, minefields became ultra defensible barriers. with search at 70 infantry could sneak up a little better especially on deeper minefields.

g. psychologically i view each mine as a "unit" and strive like the dickens to avoid its elimination. i wouldn't hang a unit out on a limb to get waxed and i don't do it with mines either. (the exception being the "nuisance" types of course.)

h. if you get involved in H/H assault/defend scenarios watch the force ratios. the default (i think it's 2.5 to 1) we have found to give the defender an edge. think something closer to 3:1. remember this is sequential unit movement. in the dreaded "real life" a defending unit can only concentrate fire on one of two units attacking on different axes simultaneously. in SPWW2 the defending unit can blast them both. also human defenders are not going to leave units remain in place until destroyed or place them in poor defensive positions in SPWW2 casualty rates favor the stationary firer and penalize the moving target. in assault/defend scenarios the assaulter is doing most of the moving under fire and suffers disproportionately higher casualties than in meeting engagements. it is amazing how much damage thoughtful and fluid defense can inflict at relatively low cost. we also adjust the force ratio for visibility. visibility at MG range (around 20-25 hexes) is defensive heaven. it permits perfect FOF overlap and the attacker

finds it tough to slip ranged weapons (especially vehicles) into firing positions without drawing opfire. with vis around 10-15 hexes the attacker can more easily isolate targets and defensive DF ranged weapons lose their edge. much longer ranges than 25 - 30 usually have no effect as terrain typically intervenes anyway. a lot of force ratio issues revolve around the experience of the two players. what's "fair" for player A vs B might not be so if A has a different opponent. tinker around. the worse that happens is you have to buy.

i. since most mines must be covered by fire it stands to reason that as visibility gets real short their value decreases. with vis low about the only good mine use is in positional defense or the nuisance mine.

j. don't forget AF! even if smoked up a couple of MGs can sling a lot of lead over a minefield and suppressed infantry's mine clearing ability
is greatly curtailed. assault guns or tanks with a lot of HE are likewise great as they can get no return DF and throw HE as well as MG fire over the field. the early PzIVs (a, b, c, aufs) come LOADED with HE (~= 60 rounds IIRC) and are more like armored artillery than tanks. don't forget the LMGs in your infantry squads for this either. one two-MG MMG unit ("two barrels") for every dozen or so mines works OK. in frontage terms think one such unit for every 6-8 hexes of minefield "edge". add arty or mortars to taste.

l. mines really "control" more than they kill. in optimum visibility they are a reasonably good buy. don't buy them in excess or buy them just to buy them. before you purchase have a GOOD idea where they are going to go and why. look for spots where they can exert good control AND be well defended. a good way to practice layouts is to set defenses up and let the AI play the defense of the field you built.

happy mining!

best,
vic

Little Aberdeen Report - Bungle in the Jungle

Date: Sat Nov 26, 2005 5:08 pm

hiya,

after leaving USMC corpses strewn through some Solomon's jungle i got curious about the effect of range/movement on fire and casualties so i did some testing. given the heavy terrain, i was running into JPN troops at very close quarters and it got pretty bloody.

this test measured the effects of fire when the firing unit was stationary (not "dug in", just stationary) and the target unit was moving.

the firing unit was a JPN squad of 10 equipped with type 99 rifle, type 99 rifle, grenade, grenade done on an unmodified (stock) oob. a squad of 11 marines from B company, 1st Bn, 5th Marines volunteered as
targets (thank you gyrenes!) in effect, 11 firing on 11. all parameters were set to 100%. there were three series of tests with 25 trials in each. (I'll upload the raw data in the form of an XL spreadsheet to the test folder.) JPN and USMC were set to 75/75 for experience and morale. both units were in jungle (wooded), level terrain, i.e. clear except for the trees, when fire occurred

in the first series the marines took fire at range 1 (adjacent) after moving two hexes (~= 3 mph); in the second test they took fire at range 2 after moving only one hex (~= 2 mph)[note: in this 2nd test fire was THROUGH an intervening wooded hex]; in the last test fire was received at range 1 after moving only 1 hex (slowest speed possible.)

remember the JPN troops had NO MG's, not even LMGs; this was rifle fire and grenades only. in some cases the marines retreated after the first volley (10 men firing); in some cases it took the first volley plus the additional single type 99 firing to back them off (11 rifles firing in total). most commonly they had to get whacked by some grenades before booking. but about 36% of the time (at closest range) they had the whole rack dropped on 'em and took it without flinching. admirable.

here are the summaries:

move 2 range 1; mean casualties 2.8, mean suppression 30.5%, retreat % was 64%

move 1 range 2; 2.2, 25.6%, 28%

move 1 range 1; 2.3, 34.3%, 64%

[looking at the data i don't believe an increased number of trials would materially alter the results.]

so it appears as if sneaking around at low speed doesn't mean much if

you're going to encounter the bad guys at range 1. the results (just from rifle fire and grenades) are bloody awful. at range 2 the suppression is lower as is the propensity to retreat (much lower) but the casualties stay high. if you look at the raw data you'll see on many occasions the marines took 3 and 4 casualties at all speeds, or 30+% on their first exposure to fire WITH NO MGs (MGs have a much higher HEK factor). on one occasion a squad took 9 (!!!) casualties nearly wiping it out.

[as an side, in a recent US/GE game a squad of yankees bumped into a two-man panzerknacker unit with mine/smg(one)/hgs. the dozen doughboys had an experience level of 95, core troops, and took 9 casualties diamonds and swords for the panzerknacker guys i guess. the three survivors got "stuck" on suppression and were wiped out the following turn. bet that smg barrel was warm!]

what is especially noteworthy is that in all the trials the marines (targets) never fired back! they just stood there and took the pounding {rifles, rifle, grenade, grenade] or (rather more judiciously) opted for a return visit to the hex they just left. further, units that don't retreat were much weakened and likely to get hammered again on the next turn (frequently they can't retreat voluntarily due to suppression).

we have been steadily increasing the attacker's strength in human/human adv/delay and aslt/def scenarios to achieve better balance and it is now apparent why. (defender still has a consistent edge.) it would be interesting to find out how much protection the target is afforded by being "in cover" itself. (maybe I'll test that too.) evidently the marines didn't find the jungle to be much protection in these tests.

i did some ersatz "smoothing" by throwing out the two highest and the two lowest stats in each category but this had little effect on the difference between range 1 stats at the two different speeds. basically moving slowly saves about half a body, 2.3 vs. 2.8 casualties in the "smoothed" version. this is a minor difference in light of the overall severity of the casualties. (less than 20%)

extensive fooling around with oob weapons stats has done little to mitigate this lethality. it'll decrease casualties some but not to the extent where it's worth the effort required. i had hoped to cut casualties by a LOT (say 60-70%) but i could never achieve anywhere near that level of reduction. [the target result desired was that an experienced unit moving slowly and encountering a stationary enemy at 1 hex would experience an average of about 1 (one) casualty on encountering another experienced unit; i can see the "point man" getting dropped. the kind of thing i was trying to achieve was that two nearly equal strength units at close range get into a standoff suppression and casualty wise and that reinforcements are required to tip the balance. when one unit gets cut drastically on first fire this development is unlikely.]

message: make sure your opponent encounters your infantry ONLY at VERY close range. you'll do some serious damage and about 2/3rds of the time he'll "bounce" and won't be able to fire (on his turn) back without moving in close again for another walloping. leave infantry a

COVERED path out of their initial position so you can move back before enemy indirect supporting fires arrive. do "overwatch" withdrawals to ensure the opponent runs into another stationary unit if he attempts to pursue/follow up rapidly with other units. a couple of turns of this and an infantry company can get shredded.

if you find you must traverse open ground while withdrawing have MGs in cover beyond the open ground to cover hexes where the opponent will emerge in pursuit. between the opfire and direct fire MGs deliver on your turn it'll be time for the bad guys to re-order body bags. it wouldn't hurt to have mortars zeroed in and waiting for targets on these "emergence" hexes either.

if you have to advance with infantry in good defensive terrain have plenty of infantry AND indirect fire support. it's tough to accurately hit those hexes in cover you can't LOS but you'd better try. allocate the mortars/arty to spots where you'd like to advance if you don't have enough to cover all the units you'd like to advance then some units will have to stay put until support is available.

for the next test i think I'll have the JPN boys moving 2 hexes and then have the marines run into them. we'll see if the JPN guys are good "hip shooters".

all the best,
vic

Vic adds:

Subject: Re: Little Aberdeen Report - Bungle in the Jungle

Date: Sat Nov 26, 2005 5:30 pm

a thought on modeling...

it looks like that all the "men" in a unit are available as targets irrespective of the speed of the unit. maybe reduced speed should limit targets available?

e.g.:
1. moving full speed down a road (100% of maximum speed of 6 hexes) all men are targets
2. moving full speed across open terrain (3 hexes) fewer men are potential targets (due to ground undulations, miscellaneous cover etc.)
3. moving slow speed (1 hex) across open terrain still fewer men are potential targets. (moving cautiously, staying low, overwatch etc.)

...and cover (woods, rough ground, buildings) reduces probability to hit.

this way a squad moving slowly ("carefully") through dense cover doesn't get 3 or 4 guys whacked because it moves close to defending units. infantry squads use internal bounding overwatch; the whole squad isn't moving at the same time especially in "indian country". also common is a "point" man or team.

in effect this is "capping" casualties for speed reductions.

only a thought.

best,
vic

Little Aberdeen Report - Modeling "stockpiled" ammo

Date: Mon Dec 5, 2005 7:18 pm

hiya,

we have always had a philosophical difference with the game regarding ammo resupply. if one can get around the concept of resupply units with unlimited ammo in all calibers/types the reload of AFVs isn't all that bad; it does take time to hump the ammo over to the tank and stow it and the rate of resupply seems reasonable. however for artillery, particularly mortars, we find the protocol onerous. e.g. in the case of multi-tube units, tube one must be fully loaded before tube two reloads.

to address this and to model "stockpiling" of ammo (either for an assault or defense) we have developed a solution.

E.g. for two-tube 81mm units (using mobhack) we added additional units which were copies of the original except for:
1. doubling the original 81mm load out (80 rounds instead of 40); doubling seems to be a practical upper limit (2 units of fire)
2. increasing the "weight" to one from zero; all that extra ammo means additional weight which a standard sized crew couldn't move
3. reducing speed; we cut it to zero forcing the use of trucks/transport to move the tubes, crew and extra ammo

we think this is a good alternative to the purchase of ammo trucks placed next to mortars permitting "shoot 'til the tubes melt" firing.

cost turned out to be somewhat of a surprise. using the USA 2x81mm unit as an example the original cost at 40 rounds per tube was 22 and we reasoned that something like 32 would be a good guess, less than buying two units with consideration for higher load cost and slower movement. when we ran the cost calculator the cost it returned was 26! the issues we missed were that 2 units are more "survivable" (i.e. counter battery fire) than one with twice the ammo and maximum rate of fire is twice as high for two units. there is some higher probability of losing the extra rounds as the unit will be firing longer and therefore more exposed to c/b.

other things you could try:
a. leave the speed unadjusted and increase crew size to provide extra bodies to hump the additional ammo. in the case cited above an extra half dozen or so men to move the extra 80 rounds (40 x two tubes) would seem practical. theoretically as the ammo is consumed there would be less to move so as few as four could be justified.

b. set the speed to zero AND add a few additional men to model the fact

that the additional ammo is somewhat more dispersed/distant from the tubes to minimize c/b risk. this has the effect of also making the unit somewhat more durable casualty-wise as does adding crew in a. above.

c. increase ammo more than double; although don't get too carried away with this as the idea is to make more ammo available but not in "unrealistic" quantities.

this approach makes more ammo available and still enforces some fire discipline as even at 80 rounds per tube ammo will only last something less than 20 turns (depending on crew efficiency and delays due to shifting fire). with minimal/zero delay each tube can pump out about 6 rounds per game turn. clearly for short games/scenarios the "ammo heavy" units aren't a good buy as the additional shots purchased may not be used.

the game already utilizes this concept to an extent with optional off-map artillery units with higher load outs so this is hardly a profound concept. in h/h play we usually don't use ammo units at all so this work-around was sort of "forced". it's also good for play versus the AI which can't use ammo units and is therefore at a serious disadvantage against a human player. if you feel the adjusted cost returned by the cost calculator is too low or too high you can always adjust it manually via mobhack.

in the case of on-map towed arty, there isn't much to be done except increasing ammo supply and adjusting cost. perhaps the addition of a couple of men might be justified for the reason cited in b. above. increasing "weight" to require the use of "heavy" transport is another thought you might wish to apply in this case.

we never considered higher load outs for AFVs/SPAs as the theoretical stowage space constraint that doesn't exist for arty does exist for vehicles. in LONG h/h games where vehicular resupply seems reasonable we have a "gentleman's agreement" that ammo resupply units can be used for vehicles only.

best regards,
vic

Little Aberdeen Report - Bungle in the Jungle - Part 2

Date: Sat Dec 17, 2005 6:36 pm

hey there,

If you recall we recently tested the results (bloody) of moving an infantry unit adjacent to a stationary enemy infantry unit. Today's test (using the same units involved in the first test) examines what happens when BOTH units are moving. In this test we had the JPN infantry squads move at top speed (2 hexes/3mph) through wooded terrain on their turn and had our USMC guys then move adjacent to the moving JPN unit on the USMC turn (also at top speed 2 hexes/3mph).

The raw data is in the files section. The new test data (series 1a) was inserted into the test_close.xls spreadsheet along with the data from the earlier test for comparative purposes.

While having the firing unit (the one "run into") moving did decrease casualties they were not decreased as much as one might anticipate (hope?).

Using the "smoothed" figures (throw out the two high and two low values), casualties when the firing unit was stationary averaged 2.71 per encounter versus 1.81 when it was also moving at top speed. Suppression was influenced even less averaging 29.95 when the firing unit was stationary and 23.29 when it was moving. The significant difference was in propensity to retreat ("bounce") by the unit which was fired upon. When the firing unit was stationary the target retreated 16 times (out of 25 tests); when the firing unit was also moving retreats only occurred in 6 of 25 trials.

An infantry squad advancing "in cover" typically deploys a point man to sniff out the bad guys. easier to do if the bad guys are moving, tougher if they're sitting tight. so the AVERAGE loss of 1.81 when both are moving seems very, very high. by looking at the data you'll note that 3 casualties when both firing and target units were moving was not uncommon. the guess here is that an average loss for a even a somewhat less-than-veteran unit moving against even a stationary foe would be (much?) less than 1 man. else 11 moves and the squad is wiped out. in cases where both are moving the loss would be a very small fraction of that experienced when the firing unit was stationary (ambush). The other thing the data show (from the last report) is that moving slowly (one hex, "probing") doesn't mean much. at half the speed AND twice the range casualties (smoothed) dropped little from 2.71 to 1.95, still nearly 2 men per move. (raw data was 2.8 to 2.2)

What's especially noteworthy is that in all the tests (100 trials) the target unit never fired back at any time, inflicting (obviously) no casualties or suppression. This latest test modeled two squads "colliding" head-on at range = 1 in wooded terrain, both moving at maximum speed. The unit which moved second got clobbered and the unit that moved first was completely unscathed. In addition, the firing unit would now "have the move" and be able to fire while stationary, unsuppressed and at range 1 so the target unit would get walloped again (assuming the target unit does not retreat out of LOS).

Using the smoothed averages, the firing unit could theoretically inflict 4.52 casualties (1.81 opfire and 2.71 on its turn) before the guys in the target unit ever got their rifle safeties off. Actual casualties would NOT be as high as 4.52 because the target unit would have been reduced in size and may have "taken cover" or even retreated out of LOS.

[Also please remember that all these numbers have the target unit in wooded terrain which (theoretically) should provide cover/protection from small arms fire. Low visibility, e.g. smoke, coupled with open terrain for the target unit makes things worse.]

When the target unit does get around to firing it will be much diminished in potential lethality due to casualties suffered. Even if the target unit retreats ("bounces"), to resume its advance it is faced with the (unpleasant) prospect of moving to range 1 again, this time with the firing unit stationary <shudder>.

All these tests also excluded the potential effects of opfire from units not directly involved. E.g. if retreating to LOS-able terrain, a "bouncing" unit could expect to get hammered again by every rifle in range capable of firing (e.g. unsuppressed).

Infantry opfire against opposing infantry (particularly at closer ranges) is the ne plus ultra of bloodletting in SPWW2. [It's better to sit under a rain of 155mm for several turns, even not "dug in".] One such encounter can cripple an infantry squad to the point of being combat ineffective. Squeezing the trigger while "on move" invites return opfire (from every unit in range) so it is best left to picking on isolated units that cannot be supported by their brethren and that are crippled and/or suppressed. [If you fire on your turn and more than one enemy unit sends return opfire, you in da wrong place. This is the job for MGs positioned so that they cannot be hit by return opfire. MGs never opfire against other MGs at longer ranges, even when fired upon by these MGs!]

All this makes getting infantry out of close terrain highly problematic. One can't area fire (Z key) as there is no LOS and movement reduction in heavy terrain (infantry moves 1 or max 2 hexes) coupled with indirect fire "scatter" makes close follow up of indirect fires with infantry assault very iffy. The best solution, if it's possible, appears to be contain and bypass much as one would do with fortification units. If V hexes are buried in heavy terrain one must reconcile themself to paying a very stiff price for leveraging the bad guys out of position. If the defender uses "retreat overwatch" (see below) it'll be bloodier still.

One can mitigate the losses by the use of the size = zero "scout" type units. these can (but not always) move adjacent to regular units without being spotted. if they can wait one turn (so as to be stationary when firing) they can put enough hurt on the defending unit to permit a regular squad to move adjacent to the defending unit without getting splattered in the process. (AND if the scouts are lucky or very good they can survive.) these little guys are pricey though, generally running about 1.5+ times the cost of a full squad; they are also somewhat fragile given they typically contain 4 men. So save them for crucial situations.

All things considered the best policy with infantry is don't move 'em! <VBG>.

Next: The LA guys test "stacking" (more than one infantry unit in a hex). E.g. what produces more lethal fire, 10 rifles in one squad or two squads with 5 rifles each in the same hex? What is the difference in casualties/suppression inflicted when firing on a 10 man squad as opposed to two 5-man squads in the same hex?

all the best for the holiday season,
vic

retreat overwatch: assume two infantry squads, one in a hex immediately behind the other. when the enemy "bumps" into the first squad it gets walloped and in all probability can't return fire or retreats (most likely). the unit which was bumped into then immediately retreats THROUGH the hex containing its supporting squad. if it can move through and take up position behind the supporting squad (becoming in turn the supporting squad) fine and dandy; it'll have at least one turn to become stationary. if it can't get through the support squad's hex, should the enemy advance again (oh, puhleeeeze!) it hits TWO squads one of which is stationary and both are unsuppressed if the enemy squad that makes the second advance was the same one that made the first encounter, adios amigo.

doing this on adjacent hexes ("staggered") works almost as well and has the added benefit of covering more frontage. one squad can usually "bounce" two enemy, sometimes three. true you must give ground but the punishment you inflict is pure murder. plus you aren't where you were initially by the time indirect fires arrive. (why sharp players aren't always targeting the enemy "front line" with IF.) when you do this drop YOUR indirect fires far enough out front to ensure you don't suffer from friendly (indirect) fire. it'll at least slow the baddies up enough to prevent them from pursuing too closely.

this is pretty much required technique against the AI which tends to mass the majority of advancing/attacking forces in about half the map (north half, south half or "middle half") and is heedless of casualties. you can't stand against the horde; just whittle it down 'til force morale breaks. a good check is the post battle summary screen, look at the RATIO of infantry casualties ("men" is a good approximation). if you're not killing AI infantry at about a 10:1 ratio (+/-) to your own losses you're doing something wrong. (15:1 is REAL good.) when the mass of AI infantry hits it will pound away at the same hexes over and over. set up a killing ground, complete with IF and let 'em come.