

SCENARIOS & VARIANTS

AIRBURST

Tactical Nuclear Weapons in Fulda Gap

by Matthew W. Foster

Heavy on the nukes this issue, eh people? Soon I'll be seeing nuclear rules for *Swords & Sorcery*... or does that comewith the standard game? Deeper into the Strangelovian aspects this time with neutron bombs (ah, make that "enhanced radiation weapon," please). As the author points out this is not a really new concept — just a new realization as to how destabilizing their deployment could be (or rather the *intention* to deploy them, eh comrades?). Or is it all just a trick to make you buy *Next War*? — RAS

It's 0620, D plus three, forty clicks east of Frankfurt. The 3rd Armored has been fighting like hell since contacting Threat forces early on D plus one, but the sheer mass of the enemy assault has taken its toll. Stocks of the vital TOW missiles are down to twenty percent inventory, maybe one more day's ammo. Dragon stocks are even lower. Burnt-out hulks of enemy tanks litter the battlefield, but the rumbling nearby says it's a fresh division that's jumping off to assault the 3rd's positions. The 3rd's combat units are still at sixty-five percent TOW, but with the ammo going so fast, a fresh division or two will shatter the tenuous line for sure. French divisions are racing madly for the Gap, but it looks as if they're going to be far too late to save the front.

As the 400-tube softening barrage lifts, T-62s suddenly break from the woodlines 4000 meters in front of the 3rd's FEBA (Forward Edge of Battle Area) spotters. Massive spread phalanxes of tanks roll across the 1500 meter front toward the 3rd's positions. BMPs follow close behind, their Sagger ready to destroy any point targets that appear. That is it.

There is one last card for NATO play. Coded authorization to use battlefield nuclear systems came through to Division at 0400. The 3rd's troops wonder where the Warhog strikes have gone, but they cannot know that all NATO aircraft have been warned away from the area. Orders flash from Division. Units prepare for the nearby tacnuke detonations. CBR troops, exhausted from the Threat's two-day old chemical attacks, prepare for action again. Decontaminants are readied.

DivArty's (Divisional Artillery) tubes train to pre-selected points. The two Lance missile task forces arm their new W70-3 warheads. Time-on-Target is scheduled and the Fire Direction Center (FDC) orders Fire! Eight-inch howitzers and 155s rumble; Lance missiles hiss from their launchers. FDC counts down: "Eighteen... seventeen..."

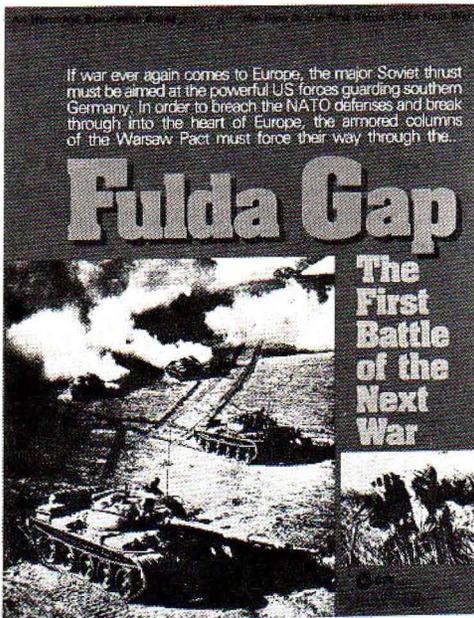
"...two...one...SPLASH!"

Bright flashes appear 100 meters above

the enemy's formations. NATO troops are disappointed at first; it wasn't half the show they'd expected and not nearly enough tanks and APCs were toasted.

Then tanks begin to slew crazily about and ram one another. APCs wander aimlessly about or roll to harmless halts. The advance becomes a grisly comedy as vehicles scatter in all directions. NATO troops suddenly realize that they've just witnessed the world's first neutron barrage. The Threat offensive degenerates into total chaos all across the Gap. Preparations for counter-attack begin.

Let's see: CBR troops, neutron barrages — Super-Ogre, right? Wrong. No fairy tale this. If the funds for development and production are allocated, this could be the battlefield scene in West Germany by mid-1979, or even earlier.



Modern Threat (I use this euphemism to leave everyone's feathers un-ruffled) tactical doctrine calls for the great concentration of an attacking division's forces at the point of breakthrough. Such massed formations are hard for a strained and thinned defensive line to turn, but they make nice targets for tactical nuclear strikes. Any grand offensive movement by Threat forces, especially against a desperate NATO, runs the risk of being nuked into little greasy spots. Not even the heaviest counter-battery can silence every gun within support range — besides, it only takes one nuclear "stick" to do the job.

The only problem is that NATO "conventional" nuclear battlefield systems may not be able to do the job. NATO has about

7000 nuclear warheads deployed in Europe; most of these are in the ten to 50 kiloton range of yield.

These medium-yield systems rely on blast and heat to do their dirty work. Collateral damage is likely to be considerable, and certainly a hell of a lot of fallout will be kicked-up by tacnuke strikes. Countryside, urban areas, and lingering civilians are going to be wasted just as well as enemy forces. *Fulda Gap* fails to take this into account.

The whole question of whether or not tacnukes will even be used is debatable. Will the warring powers want to risk escalation into a full-scale nuclear slug-fest? *Fulda Gap* pretends that they won't escalate, and so will I, but clearly the nuclear warfare rules and the victory system could use some fiddling in this regard.

First, roll a die to see when tacnukes can come into play. Political decisions have to be made, and this die roll is your "politicians." The following is my suggested die roll — availability.

| Die Roll | Turn Available |
|----------|----------------|
| 1 | 1 |
| 2-3 | 2 |
| 3-5 | 3 |
| 6 | 4 |

Only one roll is needed, because when one side uses nukes, the other side will too. It matters little who went first, but for your own purposes, you can roll a second die, with an odd number meaning that a frustrated NATO shot first, evens meaning the nasty Russians did it. What this all means to you is your own business, but remember that since "days" occur simultaneously for each player, both sides start nuking in the same Game-Turn no matter who shoots first.

Next, give the nuking player's opponent (the poor sap being nuked) victory points for each warhead detonated according to terrain. The rationale here is simple. The Threat governments don't want to capture (well, they might, but they would find that policy useless) piles of nuclear slag instead of cities. It's also hard to imagine an abashed NATO spokesman saying, "We had to destroy Wurzburg to save it." VPs in clear terrain are simple too. There is no purely clear terrain in Europe; there are houses, farms, and villages everywhere. No one would appreciate an unsolicited airburst over his property. The following is an additional VP schedule.

This brings me to the subject of the enhanced radiation weapon — the Neutron Bomb (old earth style, you grimy Xenophobe). ERWs have been tooling around Army R&D since the early 60s, but it

was only last July that General Alfred D. Starbird of the Energy Research and Development Administration told the House appropriations committee.

| Terrain | VPs to Opponent per Warhead |
|-----------|-----------------------------|
| City | 1 |
| Urban | 2 |
| All other | ½ |

Ignore fractional VPs

Two ERW systems have been developed as of the present. The W70-3 is a warhead designed for the Lance missile, and the W79 is an eight-inch artillery fired atomic projectile.

ERWs offer numerous advantages (see Figure). An ERW's blast is about 17 percent that of a similarly potent conventional tacnuke from airburst. ERWs kick-up only about 10 percent of the fallout. Conventional nukes destroy by blast and heat, ERWs by intense neutron-flux.

The neutron flux is over with inside of two one-millionths of a second of detonation. The neutrons, once released, are stopped by atomic nuclei, principally nitrogen nuclei in the air. This is why the ERW's lethality drops so quickly at range (see figure).

ERWs are hard to shield against, too. The armor thickness that stops 90 percent of the gamma radiation from conventional tacnukes only blocks out about 30 percent of the neutrons. The rest of the neutrons "shine" through. The neutrons that are absorbed by the armor cause the armor to begin emitting gamma particles. Any shielding that catches the neutrons becomes radioactive for a long time.

So, what is this in game terms? First, ERWs will be deployed with all artillery and Lance task-forces (such as the artillery units in *Fulda Gap*) and also with DivArty's general support 155s. So, all US units in *Fulda Gap*, except SDUs and STUs, have an ERW capability.

ERWs become available on Game-Turn Four regardless of the tacnuke availability result. This means that ERWs could be the first tacnukes deployed, providing that conventionals are also unavailable until Game-Turn Four. If tacnukes are already in use, it's just a NATO advantage.

Only US combat units may utilize ERW strikes. Each division of three brigades is deployed with one ERW "stick" available. Artillery units carry two sticks. One additional stick becomes available for resupply for the artillery units on Game-Turn Seven.

ERWs may only be used *initially* in defensive situations. That works like this: *before* any Soviet attacks are made, but *after* Soviet movement is completed, the US player announces he is making initial ERW commitment. Any artillery units within range of Soviet units may fire an ERW strike. This is in place of FPF from that unit, and the Soviet-occupied hex must be in range, not the defending US units.

Combat brigades may expend their division's stick at the instant of combat, prior to

resolution. If only one brigade strikes, the division's stick is expended just the same as if all brigades had fired. All brigades may attack one adjacent hex. This is in addition to artillery ERW strikes.

Artillery unit ERW strikes attack the hex on the "4" column of Table 19.24 and contaminate on the "5" column of table 19.33. Unlike conventional contamination, affected units are contaminated, not the hex itself. Place an appropriate contamination marker on top of every unit in the hex, regardless of whether or not that unit took casualties. Units that incur at least a one-step loss in the attack are retreated one hex and disrupted until the end of the *Game-Turn*. This simulates the total disorganization that a neutron strike would cause. Contamination attacks occur in the Contamination Removal Phase prior to contamination degradation. Neutron contamination is reduced one level each Removal Phase automatically.

After initial firing, artillery units may expend their remaining sticks either in the nuke phase or defensively as outlined above. Supply units are still only affected by an "x" result, but are considered ineffective as long as they are contaminated.

Divisional ERWs attack on the "3" column of Table 19.24 and contaminate on the "4" column of Table 19.33. Otherwise their effects are as outlined above, with the exception that they may be used only once per division and only in defensive situations.

In the phase of initial defensive use, all units that may make an ERW strike, *must* make an ERW strike. This simulates a "shock" doctrine for initial deployment.

No collateral damage is sustained by units adjacent to the target hex, ERWs may be safely employed close to US troops because of a larger buffer zone and smaller kill zone than conventional nukes. Only hexes adjacent to US units may be offensively attacked by artillery units in the nuke phase. Consequently, Electronic Warfare has no effect.

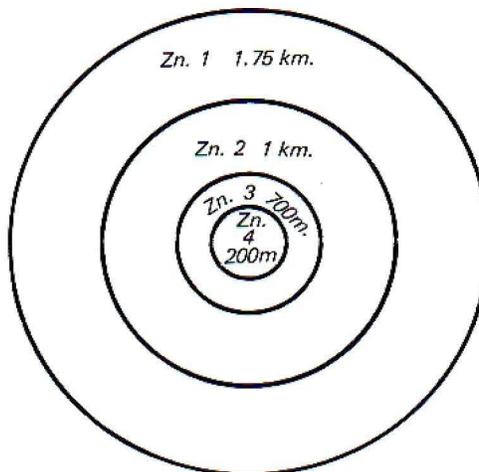
A final note concerning all nuclear strikes: I suggest that no airstrikes can be made within one hex of any nuclear strike. I don't think NATO command would risk flying a squadron of A-10s into one of their own airbursts.

Using ERWs may be realistic (providing . . .), but it may also tip play balance slightly in NATO's favor. I suggest that at least half of the divisions recommended for the Main Effort variant be used in conjunction with ERW rules. I think it's reasonable to assume that the Gap would be a Soviet main objective anyway. The addenda for conventional strikes, however, is applicable in either case.

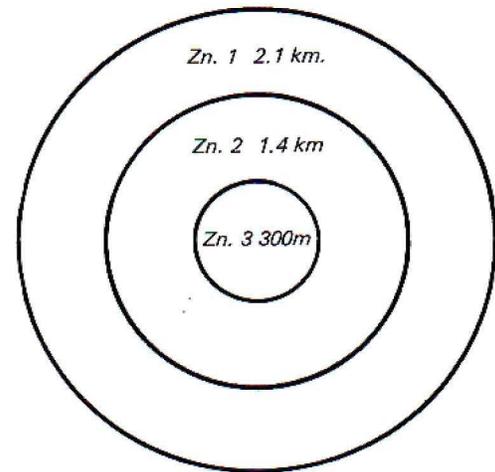
These changes are strongly based on fact and doctrine. Using them may require just a little more bookkeeping, but only a microscopic amount when compared with the added dimension in game terms.

| ERW EFFECTS | | Effects of Conventional Tacnukes |
|-------------|----------------------------------|----------------------------------|
| Zone 1 | Buffer zone, little radiation | Blast damage, little radiation |
| Zone 2 | No blast damage, fatal radiation | Blast damage, some radiation |
| Zone 3 | Little blast damage, fatal rad. | Blast damage, fatal radiation |
| Zone 4 | Blast damage, fatal radiation | |

Airburst Diagrams



ERW (Enhanced Radiation Weapon)



Conventional Tacnukes