

Berlin '85

Blindtest Report in

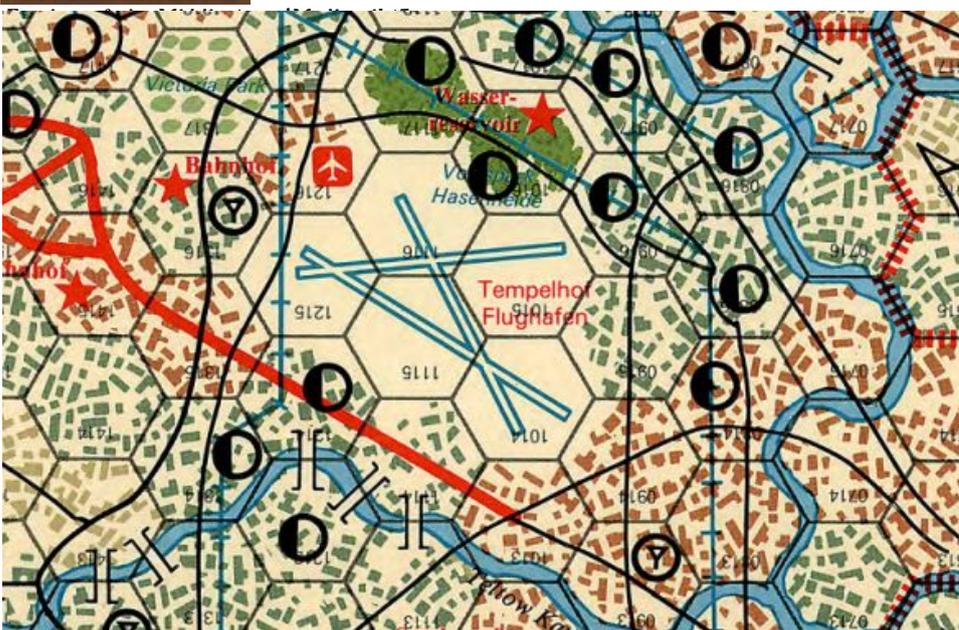
Berlin: 1985 Grinding it Out

SPI is often characterized as a factory which grinds out the product without much "soul." Despite the pejorative nature of that characterization, there is a grain of truth in it. SPI does, undeniably, grind out product in the manner of a factory rather than a cottage industry. I am not sure that such a system is inherently bad, though. *Berlin*, for example, could probably not have been produced by anyone else without the investment of far greater amounts of time and money (and then there's no ironclad surety that the game would have been any better than the existing product!). Here then is how we grind 'em out.

I first encountered the game at the end of October. To start with, I didn't know *Berlin* from chopped liver and was perfectly satisfied to keep it that way. But JFD has a way of motivating people. When he rushed into my office one day and said "we gotta get started on designing *Berlin* right away," I knew that there was nothing I wanted more than to start designing *Berlin* right away.

The basic system was to be Jim's *Modern Battles* system. The reasoning was that it was an existing system which had been thoroughly tested over a period of years, that allowed us to cover the ground at an appropriate scale and was clean enough to allow a heavy amount of "dirt" to be thrown in to cover the special effects of the city. In short, it allowed us to grind the product out. Since *Modern Battles* was Jim's branchchild, a creation he understood quite intimately, the basic design parameters would be set by him to accord with his perception of how city fighting would modify his existing system. My job would be to get into the trenches and test his ideas, manufacture the components, communicate with the blindtesters, and do the 1001 totally unglamorous things that go into putting together a working design. In practice, the work was divided up somewhat differently.

The prime factor in altering our division of labor was the very nature of the feedback proposal that engendered the product. The proposal had concentrated on the effects of the city (with little reference to the forces involved). Preliminary investigation indicated that the game had to follow that lead and showcase the city, as it were (see the illustration of the playtest map). Basically, we found that 40% of Berlin was water, park, forest, etc. About 20% could be characterized as suburban, and the remaining 40% was urban-industrial. The area is dotted with lakes, and the city center is divided by rivers and canals. Fighting through that kind of terrain must be handled differently than fighting in clear terrain. Furthermore, the importance of terrain in the game meant that an almost hex by hex analysis had to be done... which is



And now for something somewhat different. If you read the preceding carefully, you probably noted the mentions of Stafftest and Blindtest reports, slated for specific issues of *S&T* and *MOVES*. We are responding to a perceived desire for more detailed Progress Reports and Designers' Notes with an experimental pilot program; instead of a scanty paragraph each month for each game, we are going to try reporting in detail on a few games, scheduling the ongoing projects' reports such that each game is reported on at least twice. The first report will be subsequent to the time that the designer unveils his creation at a Stafftest, and the second will be after prototypes are sent out for testing by non-SPI volunteers (Blindtest). This issue contains a Blindtest Report on *Berlin 1985* and a Stafftest Report on *Timetripper*.

Battle for Berlin, 1985

This is another one that sort of dropped into my lap. I gave it a few days thought, then teamed up with Dave Ritchie, and ten days later we were playing the game.

It is not as simple as it sounds. Basically we have a map of West Berlin and its environs. The scale is 1000 meters to a hex. The game system we are using is basically the one found in *Modern Battles II* with some modifications for the different scale (*Modern Battles II* had about 1600 meters to the hex). Dave is the new guy here, so I scrounged up the maps, and we discussed what features to show and how to show them. Then Dave did a very impressive job of putting together a highly detailed, highly usable gaming map of Berlin. The order of battle was available from sources we had lying about (although we're still trying to figure out the precise organization of the 20,000 man West Berlin police force).

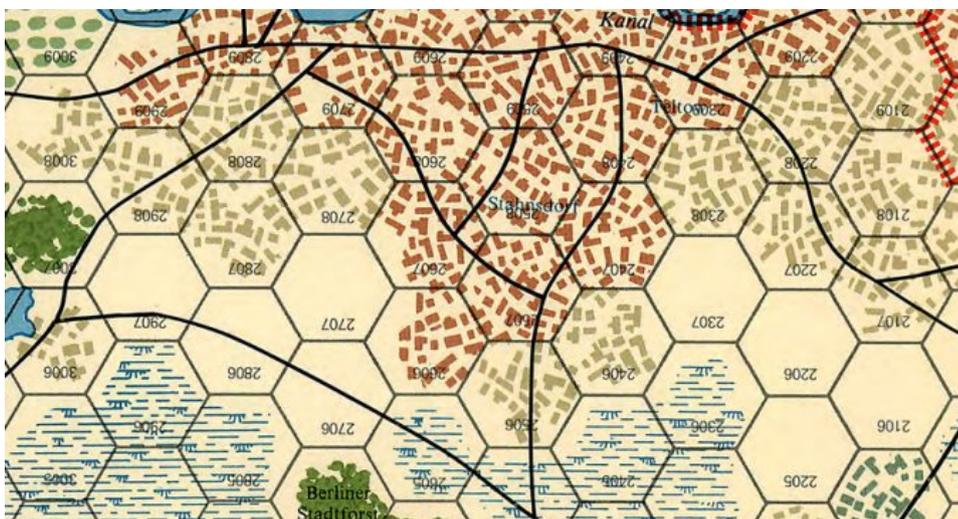
I added a couple of special rules for things like "they shall not pass" (when a defender is forced to retreat, he can elect to refuse and then roll a die; if the die roll is equal to or less than the number of hexes he must retreat, he is destroyed, otherwise he stands). There is also the "honors of war" rule in which the Soviets can demand surrender any time they want. I had to work out a rather involved table for this because there are a number of things that can happen depending on how many units the garrison has lost. Generally speaking the more losses the garrison takes, the more likely they will succumb to the offer of "honors of war" and surrender. However, adverse results other than sur-

render are possible for either side (shifts on the CRT) or a one-turn cease fire, which is particularly bad for the Soviets as they are racing against time.

The victory conditions are particularly interesting in that the Soviets have to storm the city and take it with minimal losses. Otherwise the garrison, even though it is ultimately defeated, actually "wins."

So far, it is pretty interesting. We've developed a number of other rules (I've only mentioned the ones I dreamed up; Dave's come up with a few of his own), and we'll be giving them out to you in the next issue of *S&T* when the game appears. This last thing occurred when it was discovered that *Battle for Berlin* had progressed so far so quickly that it was actually ahead in development of the game originally scheduled for *S&T 79* (*Tito, The Partisan War in the Balkans 1941-1945*). That game is very interesting, but we really got rolling on *Battle for Berlin*, and the game's been out for blindtesting since the middle of November.

JFD (designer)



where I got my real introduction to the absurd hours the R&D staff at SPI puts in.

Our primary map source for Berlin was the DMA 1:50,000 series covering Berlin, Charlottenberg, Potsdam, etc. Before the terrain analysis could be attempted, we had to reduce these maps to get a scale of a kilometer to the hex to fit battalion frontages (not to mention getting all of West Berlin on one map). The reduced copies of the map produced by our stat machine had to be cut and pasted together to form one large map. A tracing of the large map was then done, and the resulting provisional analysis compared to some 1:15,000 and 1:25,000 maps we had obtained from West Berlin and East Berlin tourist agencies. Over the next three weeks, the map went through three configurations as we slowly built up a picture of the terrain. Inaccuracies in the DMA maps due to outdated information had to be corrected and anomalies had to be eliminated. All of this took about 60-70 man hours of research and analysis, mostly done late at night after other work had been completed.

We wanted to stick with the terrain types used in *Modern Battles* as closely as possible, so Jim set forth a list of categories to which he proceeded to attach movement and combat effects. These corresponded roughly to the types in the *Modern Battles* system with some adjustments for the special nature of inner city terrain. The map analysis followed this outline by abstracting some specialized terrain which was functionally similar to existing categories. Thus "bog" terrain in the game represents all ground where the water table is immediately subsurface, including peat bogs, marshes and fields crosscut by drainage ditches to make them arable. Somehow, calling the type "bog" captured what was being portrayed better than using the term "swamp" or "marsh," but all of these types tend to function similarly in terms of game effects.

As it currently stands, the game employs the following types of terrain:

Open: Relatively flat, clear expanses of ground (including that on which airfields are found), characterized by wide fields of fire. There is very little of this in the game. Where it exists, it is inexpensive to enter, is neutral in combat, and makes ideal ground for paratroops.

Airfield: There are two types in the game: the Flugplatz (a small field without major commercial traffic, usable for military transport); and the Flughafen (large commercial airports). The Flughafen has a control tower/terminal hex attached which it is necessary to control before the field, itself, is usable. The game allows for the use of airfields of both types to airland supply and reinforcements at varying rates.

Park: This type includes everything from the Tiergarten, zoo, Charlottenberg Castle, pheasantry, and similar parklike areas to the grounds around the Olympic Stadium and the parklike zones in which both sides set up their border checkpoints. This type of terrain is characterized by highly "managed" vegetation (little underbrush, few deadfalls, clear fields of fire at waist level and below) and the presence of manmade objects and some construction usable as strongpoints. In game terms, movement is only slightly slower than in clear terrain, there is a one column combat shift for the defender due to the increased cover combined with open fields of fire, and there is the possibility of collateral damage due to concentrations of artillery in the hex.

Forest: Unmanaged (or lightly managed) areas with significant ground cover. Characterized by limited visibility and accessibility, these hexes give a one column combat shift to the defender, cost three MP's to enter, are subject to an in-

creased probability of collateral damage, and militate against paratroops by modifying the chances of paratroop survival.

Rough: Broken (often wooded) terrain, including small mountains, hills, ridge lines and quarries. The terrain is not as difficult to move through as forested terrain, but the combination of light ground cover and irregular elevation is about as effective as parkland in slowing movement. From a combat standpoint, rough terrain is more potent than forest terrain by one column, giving a modification of +2 to the collateral damage die roll (making damage more likely) and decreasing para survivability by a modification of 2 to the die roll.

Bog: Peat bogs, marshland, and drained fields. The nearness of the water table to the surface makes it difficult for all types of AFV's, and especially APC's, to operate in this terrain. However, such terrain usually offers limited cover for strongpoints combined with wide fields of fire. Consequently, the movement cost for the terrain is 4, but the combat shift is only 1 column. No possibility of collateral damage. No effect on paratroops.

Suburban: This is a composite category. Included under this heading are housing projects, villages, light 1-5 story buildings, and non-industrialized strip areas. Basically a grab bag of light construction and semi-dispersed structures, suburban terrain is characterized by substantial cover, combined with moderate fields of fire, but without the significant potential for construction of strongpoints found in the city core. In the game, such areas can be easily traversed since the substantial road network (not to mention the often flimsy construction of the buildings) makes them almost equal to open terrain for AFV-mounted troops. The two column combat shift represents the ability of troops in such terrain to fire respectable distances from defilade. A collateral damage modifier of 2 represents the susceptibility of light wood frame and brick construction and slab concrete construction to artillery fire.

Industrial: This is one of the main kickers in city fighting. Industrial areas include factories, roundhouses, switching yards, dock areas, warehouses, tank farms, and utility installations. They are characterized by large numbers of extremely strong positions eminently suited to conversion into hedgehogs and surrounded by moderate to good fields of fire. The slab concrete used to build such installations is highly productive of defensible rubble. The monumental construction of the buildings also tends to provide a good deal of protection from most modern weapons. Give this area an entry cost of 1, combat shift of 3, and collateral damage modifier of +3. Industrial hexes are slightly unfavorable ground for landing paratroops with a survival die roll modifier of -1.

Urban: This is the second main kicker in the game. Urban terrain is characterized by large numbers of structural steel buildings mixed with older style, closely packed, brick and stone construction. The frame steel buildings are almost indestructible (witness the fighting in Lebanon), but the other buildings are heavy rubble producers. Fields of fire are slightly limited and the combination of limited fields of fire and sewer and rooftop movement makes these areas nightmares through which to fight. While limited fields of fire will tend to hamper the defense, the almost incalculable amount of cover available means that the offense must consist of primarily infantry moving in to dig 'em out with the grenade and satchel charge. Movement costs 2, combat benefits the defender to the tune of four column shifts, rubble production gets a +3 modifier and paratroops are penalized by 3 (you don't drop men out of airplanes over fully urban areas and expect them to coalesce into a functional fighting unit).

Water: For our purposes, water hexesides are what are important. Some of the larger lakes are up to 1500 or so meters across. Mostly, though, we are dealing with rivers and canals of 200 to 300 meters width. In the original version of the rules, we included cases covering the use of engineers to bridge rivers. It was a lot of dirt. What we have now is a basic water crossing cost of 4 points per hexside. The reason for the change should be obvious when you look at the engineering capacity of the average Russian division. With 10xMTU's, 20xTTMN's, 12xGSP's and 18xPMP's, the Russian division is not likely to want for bridging and ferry capacity. Then, too, the 60 or so water crossing units organic to each division do not include the probable attachment of an additional engineer regiment and pontoon bridge regiment at Army level. Our side isn't as lavishly equipped with bridges as the Warsaw Pact forces, but then we don't have to be. Each independent brigade in Berlin has an engineer complement with bridging capacity which may be an unnecessary backup for the existing bridges, not to mention the three score large size ferry boats and thousand or so small boats in West Berlin. Add to that total the presence of industrial barges, and it becomes apparent that, while it may take a while to organize a river crossing, no body of water in West Berlin is going to stop a modern army.

The Wall: Both sides maintain a perimeter defense around West Berlin. The total zone is about 600 meters deep, equipped with brick, block, or wire obstacles, dotted with towers, and sown with mines in places. The East Germans keep three brigades on station on their side of the perimeter. Exactly what we keep on our side of the wall for patrol purposes is not the subject of West German press releases. The effect is, however, not militarily crucial. The wall may stop police from entering the enemy zone of operations, but well armed regular troops should not take more than a couple of hours to negotiate the wall, and the assault elements of an attack would probably make it through in half an hour. In the game, movement over the wall costs 3 MP's.

Communications Lines: The game map shows primary roads, the U-bahn and the Autobahn. Generally, secondary and tertiary roads are subsumed under the basic terrain type in each hex. The primary roads aid movement except where blocked by ruins. The U-bahn is a slight aid to movement and a definite aid to tracing supply. The Autobahn is the "fast lane" to conquest. Rubble doesn't block it (too wide, for the most part) and movement along it is extremely fast.

Supply Hexes: These symbols represent police stations, prisons, the police school, rifle range, and barracks, among others. Generally, a supply hex is defined as any hex containing an installation under German control which might be used as an ammo or general supply dump. Remember that the police are militarized in West Berlin (more on that later).

Barracks Hexes: The French, British, and Americans each have a brigade in Berlin. All three brigades require barracks, motor pools, dependent housing areas, ammo dumps, training areas, and fuel dumps. These installations have all been subsumed under the general heading of "barracks hexes." In the game, NATO units draw supply from these little enclaves of Americana (or whatever) in the heart of the city while the West Berlin police draw supply from normal supply hexes. In addition, capturing a barracks hex increases the possibility of a NATO surrender. After all, even the most gung ho among us must pause to contemplate what it would mean to the wives and children of our fellow countrymen to be captured in an assault on a fortified city. Russian behavior in Berlin in 1945 was not characterized by adherence

to the Geneva Convention when it came to civilians, and there is no particular reason to assume that 1985 would be any different.

Objective Hexes: These are representative of two types of installation: seats of organizational control (government, police, etc.) and vital services (gas, water, sewage, heating, electric, etc.). Needless to say, if you control these, you control a substantial part of a modern city. In the game, they are used to increase the probability of NATO surrender.

POL Hexes: We found a curious doctrine tucked away in the back of a couple of training manuals dealing with what has variously been called MOBA (Military Operations in Built-up Areas) or MOUT (Military Operations on Urban Terrain). The idea is to pre-target areas containing flammable chemicals or POL and lure the enemy into such areas which can then be inundated with white phosphorus. Gruesome as it sounds to speculate on the possibility of burning 800 or 1,000 men alive, the speculation has found a place in the game. We were able to pinpoint all (or most, anyway) of the fuel dumps and tank farms in West Berlin and have marked them on the map. The collateral damage effect of artillery is tripled in these hexes and units occupying the hex when collateral damage is assessed are eliminated. Short. Simple. Brutal.

Of course, we didn't start out with all of this terrain on the map. We started with fewer types, and for a while we had more. As for the way the terrain operates in the game, that was partly a function of playtester feedback and partly a function of research. Which is a tale in its own right. . .

SPI put this project on the schedule fresh upon the heels of doing *CityFight*, and we were able to draw on that game for much of the necessary doctrinal and organizational information. This is an aspect to SPI's "factory system" which critics often ignore; the ability to build on an ongoing body of research, often making a succeeding game far easier to do than its predecessor.

Aside from the *CityFight* material and some fairly current OB information drawn from *The Next War*, we didn't have much to go on. There were a lot of rumors and even more questions regarding the military situation in and around Berlin, and much of the design work on *Berlin* has been taken up with verification or rejection of rumors.

The first step in this procedure was a mailing which went out to selected *S&T* subscribers and SPIRIT members, mostly military and intelligence people, requesting information on the areas covered by the game. Within a few weeks, we had a fairly solid idea of what we had and what we still needed. The picture looked like this:

Outside of Berlin, the Warsaw Pact had the 20th Guards Army, consisting of the 19th, 6th Guards, and 14th Guards mechanized divisions with the 34th artillery division available in support. In Potsdam was the 1st East German mechanized division. The other divisions in the area were armored and attached to the 3rd Shock Army. Obviously, the significant units were the mechanized divisions, not the armor which was unsuited to the terrain and attached to an army which had its center of gravity far west of Berlin. Since 20th Guards Army had their center of gravity almost dead on the city, it was a reasonable assumption to place 20th Guards mission as being either to attack or screen Berlin, possibly with assistance from the 1st East German division and the East Berlin police (we figured them capable of putting about 8 battalion equivalents in the field as garrisons or flank guards). Just for the hell of it (and because the WP would obviously want to take this target quickly), we assigned the 103rd Guards Parachute Division to the 20th Guards Army for

the operation and moved its base to Cottbus. Thus, the Warsaw Pact OB was a matter of both speculation and open record. No sweat.

When we got to the Berlin garrison, we started having more than casual difficulties. The enclave is small. It is characterized by the "Berlin spirit," a combination of acute paranoia and overconfident pugnaciousness. I don't know if it's classified, but you can't even get a good figure for the number of rolls of toilet paper used by the garrison. Not knowing what exactly is classified, there is a reluctance on the part of those who know anything to talk. So. . .

We started collecting scraps of information. First, the easiest stuff. A good British OB and an American OB were easy to come by through past research and regular contacts. The French were simply assumed to have a '67-type independent infantry brigade for the nonce (though we are getting better information on that score in a week or so). People we talked to who had been in Berlin filled in some of the gaps. Yes, there was extra armor in the garrison. Yes, the Special Forces unit was airmobile. No, all the tanks didn't have dozer blades. That sort of thing. Later, we found that the headquarters unit in Berlin could probably field some units in addition to the regular combat brigade, though there was some doubt as to the effectiveness of their units. By the end of the third week, we had a relatively decent OB for the NATO garrison.

The problem was the West Berlin police. Berlin is probably the most heavily policed city in the world. The latest figures at our disposal (1978 data) indicated a force of 13,000 uniforms with 4,000 reserves, 1,500 administrative staff and 2,000 detectives. In addition, we found that the Federal Republic was spending 11,000,000,000 DM this year on "military aid" to the city. That's about \$5,000,000,000. A substantial sum to be spending on whistles and badges.

Rumor had it that the police constitute a paramilitary force designed for the defense of the city. But we could find little to go on except rumor — that and a near certainty that nobody pours billions of dollars into military aid to a nonexistent military force, nor does anyone maintain two to three times the number of police considered necessary to protect a population unless those police are training to nail more than cutpurses.

What finally came through was a picture of 12,000 uniformed police trained as a paramilitary force, but engaged in police duties most of the year. From a gentleman in our SPIRIT file, we learned that the police have light AFV's. From others we learned that training for MOUT was fairly extensive and, apparently, included use of the sewer system, that military supplies had been stockpiled for the police and that their equipment was analogous to the *Grenzschutz* (the Federal Border Police armed and equipped with helicopters, patrol boats, wheeled AFV's and the full range of infantry weapons). As the same information and observations began to come in from different sources, we took a rough guess at organization to match all that equipment and set up a TO&E.

Lest you get the impression that all was smooth sailing in our search for a meaningful OB . . . well, think again. JFD and I went at it tooth and nail a couple of times over the exact valuation to be placed on the police forces. In the end, I think we changed the values about three times and only resolved our differences by putting in compromise rules which left the police with the same average number of strength points, but limited their ability to act other than defensively by not allowing them to cross the wall or enter an enemy ZOC. As it turned out in the game, the police make wonderful perimeter holders, but

lousy soldiers, otherwise. Like most modern paramilitary forces, if you put a machinegun in their hands and a couple of feet of concrete overhead, they are respectable, but are, otherwise, quite useless. Anyway, that was the compromise we came to. It works nicely in the game.

It was late in the design process (less than two weeks ago, in fact) that we started revaluing the WP units in the game. The problem, here, was one of mechanics. We didn't want to start allowing unit stacking and get into all of the rules tangles that would result from such a major change in the existing system, but there didn't seem to be any other way to handle Soviet doctrine. Basically, the Soviets expect to employ up to 50% of available artillery in a direct fire mode (one figure I heard was a battalion of artillery in support of each mechanized battalion). The range for direct fire in the type of terrain we had selected for this game would probably run between 300 and 900 meters with an average of 600 meters. With 1,000 meters to the hex, it was stack or find some sort of fudge factor, because we obviously couldn't just put ranged artillery two hexes away and say it was supporting infantry unit "A," nor could we expose an entire regiment of artillery to destruction in adjacent attacks. The solution turned out to be very simple in the end. We just eliminated the 122mm battalions integral to each division, increased their strength to represent their use in direct fire, and spread the strength factors over the attack and defense strengths of the existing mechanized battalions. Result: tougher Russian units better able to attack and defend without masses of ranged artillery.

Another late change was a scale adjustment from 12 hours to the Game-Turn down to 8 hours to the Game-Turn. That may sound simple, but a change in something that basic means that movement and combat capabilities have to be adjusted or recalculated, and the effects of that tend to proliferate throughout the system. However, the effect was to give us night Game-Turns and concentrate the action into two turns each day, leaving one turn for rest and redeployment. The game feels much better now. It plays truer to life.

Not all changes in the Modern Battles system took place during playtesting and development. Some alterations had already been made before the first night the playtesters saw the game (about 10 days after the project was initiated). We didn't want to see defending units in Enemy ZOC's forced to counterattack out of a strong position which should have insulated them from the opposition so we eliminated ZOC effects in urban hexes where buildings are tightly packed, fire is restricted, and it is possible for enemies to exist in close proximity without hostile contact. This change also allowed for the fact that normal frontages are so reduced in city fighting that ZOC's at our scale were almost an invalid concept.

Another alteration with which we started the design was JFD's "They Shall Not Pass" rule which allows a unit to hold in place instead of retreating (at a certain risk of destruction). Of course, Jim insisted that the players actually be made to say "They shall not pass" when using the option.

The most interesting element of the lot, though, was the "Honors of War." I'm not sure why exactly Jim decided we needed this rule, but it has proved to be a beautiful piece of design. Though it has been altered somewhat from what it was originally, the rule retains in its present form most of the elegance with which it began its life. Basically, by totalling up "surrender points" for casualties and objectives lost, a "surrender point level" is found which when indexed with a dice roll gives a possible result. That result represents a reaction to the Warsaw Pact Player's offer of

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OUTGOING MAIL *[continued from page 18]*

"Honors of War" (a voluntary exercise designed to get the city pacified more quickly). Reactions range from the morale effects on the troops of both sides, based on the knowledge that surrender talks are underway to a Cease Fire (loss of turn and of any victory points he might have gained if the WP Player had not offered "honors of war") to outright surrender. The rule brings a truly political element to the game, provides a quick and predictable (but controllable) end-game, and takes into account outside factors (the political situation at NATO HQ, etc.). The nicest thing about the rule, though is that it offers a balanced risk-benefit to the Warsaw Pact Player. He can offer "honors" or not, but if he does, he is essentially gambling that his performance up to that point in the game has been good enough that he can win it all. If he fails to win it all, the likelihood is that he will lose big.

Well, that's about it. I won't say that I have said everything there is to say about the game. If it turns out to be half as good as I think it can be, there will be a lot more said about it, but it will have to wait for someone else to do it. We started the project the last week in October. It is now the first week in December. The system is, for all practical purposes, complete. What remains is to add some scenarios to supplement the basic one with which we tested the system. The next month will be spent generating and balancing these. By the end of December, the game will be finishing up its life cycle in R&D, going on to RAS and company in the Art Department. Two months from start to finish. Not bad work for any factory. But if you think there was no "soul" put into the game, you just haven't been reading this report.

D. J. Ritchie (developer)

