

## **DESIGN NOTES FOR “ODE TO ARAB-ISRAELI WARS”**

**By  
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Ode to Arab-Israeli Wars is a collection of the original 24 scenarios that came in the game. These have been converted to Divided Ground standards so that these scenarios may be played in that format. As there have not been any previous scenarios submitted to the Games Depot based on the situations from this game, these will be a first. One may ask why I am doing this. Well to pay homage to this game that was clearly the inspiration for the creation of Divided Ground. Just as East Front was inspired by Panzerblitz and West Front was inspired by Panzer Leader, so too was Divided Ground inspired by Arab-Israeli Wars. And as with my Ode to Panzerblitz Series I have established a consistent set of standards of conversion from the board game to the computer game.

These scenarios are not for everybody. If you want to play Divided Ground, just go to one of the several dozen fine scenarios that the game has, both those with the game and those that are on various websites on the Internet. But if you want to play Arab-Israeli Wars on the computer, then try one or several of the 24 original scenarios which came with the game, which I have presented here.

### **The Mapboards**

The first task that I had to accomplish was to establish the standard size of the mapboards based on their arrangement in the various scenarios. For the single mapboard, the dimensions were a length of 34 hexes and a width of 11 hexes. These dimensions insured that the half hexes on the individual boards were filled out into whole hexes. Unfortunately it created extra hexes in the width which did not exist on the boards. There is also an extra row of hexes in the length. The length of a playing board is 33 hexes, which includes the filled out half hexes. However the computer program only allows me to have map lengths of even number of hexes, so I opted for 34. These extra hexes do not present a problem when I make my maps as I leave the extra hexes clear and they only exist on the bottom and right edges of the map (or top and left edges when the map is reversed).

However the scenarios in the game have different setups for the mapboards. The most common is two mapboards side-by-side. This has a length of 34 hexes and a width of 21 hexes. The next common is two mapboards end-to-end. This had a length of 66 hexes and a width of 11 hexes. One scenario had four mapboards side-by-side, this one measured 34 hexes in length and 41 hexes in width. There are two scenarios that have special setups for the mapboards and these I will explain in their own individual scenario sections.

Next I decided to use Desert terrain instead of Mediterranean terrain for the maps. The mapboards in Arab-Israeli Wars all depict desert like terrain so it was best to follow suit in this case.

The next task was to establish the road net on the boards. I chose to use hard surface roads with all the routes as this is how the roads are in Arab-Israeli Wars. I know that in desert terrain a lot of roads are frequently unimproved or just desert tracks but I felt that I had to stay true to the game, not reality. In cases where the roads go into the extra hexes in the right side and bottom of the maps I merely extended the roads in the direction that they were going to the map edge. Once the roads were in place, next would come the towns. Although the mapboards in the game show filled in town hexes, I felt that given the rural setting the boards that the village would be the most appropriate type of terrain to represent the towns. Granted the village hexes look rather sparse when it comes to buildings but one must remember that there are more buildings in the hex than what the hex portrays. Since the towns in the game are village in size, therefore they will be portrayed as villages.

The next task was to establish the hills. These only existed on AIW Board D. Based on rules in the AIW Rulebook I established a delta level of 20 meters between each height level. Fortunately, there are not very many height levels. Just about all hills are level 1 in height with one hill having a level 2 hex. Vegetation was rather simple, I used the orchard symbol for any woods hex on the AIW boards.

The next problem was unique to Arab-Israeli Wars. On the mapboards are elevation hexsides representing sand dunes, ridges, and hill crests. The hill crests which were on hills I treated like the brown hexsides on the Panzerblitz boards, they are merely obstacles to observation and not to movement, therefore I ignored them as the computer will figure out the visible hexes through these hexsides. The sand dunes were also easy as there is a symbol for them in Divided Ground. This left the ridge hexsides. These would represent raised portions of the otherwise flat ground which block line of sight., plus give a defensive benefit. I could not use embankment or escarpment hexsides in the mapboard manu because these only work when there are height differences between hexes these hexsides border. So what I did was to put terrain in the hexes that these hexes would board on the AIW mapboards. Where a hex had ridge hexsides on three or more sides of the hex, I put in rough terrain. Where the hex had ridge hexsides on one or two hexsides I put in hammada terrain. This gave these hexes a very natural rough look. Looking back on the boards with the sand dunes on them, I found that they looked a little bare. So in hexes which had sand dunes on three or more hexsides I put soft sand.

Lastly there was the Suez Canal, which is on AIW Board A. The canal itself was simple enough to make, it was the moraine hexsides that border both sides of the Suez Canal that presented a problem. The solution was to use sand dunes to represent the moraines. As a rule, sand dunes which represented moraines would not count when determining whether a hex could have soft sand in it as noted in the previous paragraph. In some scenarios where there are "cuts" in the moraine on opposite sides of the canal, I just simply removed the sand dunes from those sides. According to the AIW rulebook, Improved Positions, when placed behind the moraine hexsides on the west bank of the canal, allow units in them to see over the moraine hexes on the east bank of the canal. (Historically, the moraines on the west bank were higher than the ones on the east bank.) In order to

facilitate this I merely made the hexes in which the improved positions would go into Height level 1 hexes.

Sadly, the AIW mapboards have no labels on them. Therefore, I only place the compass symbol on the board when finishing out the board.

## **The Orders of Battle**

The next challenge was translating the Arab-Israeli Wars opposing forces in the game scenarios into approximate orders of battle for the Divided Ground scenarios. To do this we must divided the counters into three categories; infantry, artillery, and vehicles, because each category must be handled separately.

The infantry counters in Arab-Israeli Wars represent more than just the type of units named on the counter. Frequently, these represent the named unit plus attachments from support elements such as machine guns, light mortars, and anti-tank recoilless rifle units. These units have no counters in Arab-Israeli Wars, with the exception of the Israeli MG units, but do have units in Divided Ground. Thus I used the orders of battle for the type of major organization and time period in question and added the support units in proportionate numbers to the number of infantry and engineer units. When the number of infantry units in the scenario was less than battalion in strength, I would pare back the support units that would normally be with them. I was careful to keep the overall number of each type of major weapons systems the same in Divided Ground as they were in AIW. This meant that some times, for example, I would have to give two mortar units in Divided Ground for each mortar unit in AIW. In another example, dismounted ATGMs units in Divided Ground usually have fewer strength points than the number of weapons represented in an equivalent counter in AIW. In cases like these I would increase the strength points in the Divided Ground unit to match the number of weapons represented by the AIW counter. One should note that in Arab Israeli Wars, there were a number of support weapons that were classified as infantry units. These included dismounted ATGMs, Anti-Tank Recoilless Rifles, and Medium Mortars.

Artillery units were rather easy to convert. In the Arab-Israeli Wars, all artillery units have six guns, howitzers, mortars, or dismounted anti-aircraft guns. All I had to do was to count up the number of each particular type of artillery that were required in a scenario and then make the equivalent number of units to place on the map. Of course there would more artillery units in Divided Ground than in Arab-Israeli Wars, and some of those units were of reduced strength, but the total number of artillery pieces required in a Divided Ground scenario equaled the number pieces in an Arab-Israeli Wars scenario. Sometimes I had a choice of more than one type of weapon of a given caliber. In these cases I would give the best choice to the side in question, unless historical references specifically mentioned that a particular type was used. One thing that Arab-Israeli Wars has that its two brother games do not is off-the-board artillery. In AIW off-the-board artillery is assumed to reach anywhere on the board. In Divided Ground that is not always possible. I always place off-the-board artillery just off the board, centered on the owning player's

side. As with on board artillery, off-the-board artillery comes in six gun batteries too, thus I only choose those artillery units that come in six strength points.

As in the “Ode to Panzerblitz” series of scenarios, vehicles are treated differently for each side. For the Arabs, which used the Soviet organizations of the time, the tanks units were based on the ten tank company. This meant that they had three platoons of three light or medium tanks each or two platoons of five heavy tanks each. Since each Arab tank represents five tanks I just add up all of the counters of each type of tank in AIW, multiply by five then divide the total number by ten. For each ten tanks I either created three or two platoons, depending on the tank type. Any remainder I just made into battalion and brigade HQ units. The assault gun counters have six vehicles each. Since assault gun units operated in six vehicle batteries except in 1973 when they operate in two three vehicle half-batteries, it was pretty easy to figure out the number of units needed for each scenario. The exception to this is the Jordanians, who operated using British style organizations, usually four or three tank platoons, depending on the war. The Israelis used five tank platoons in 1956, four tank platoons in 1967, and three tank platoons in 1973, although there are exceptions in each war to this. Again I add up the total number of tank units in AIW, multiply by five, then divide the total by the size of the platoons used to get my tank units for Divided Ground. Any remainder is usually made into company and battalion HQ units, with an occasional brigade or even divisional HQ unit. Although the standard organization is three platoons per company, sometimes I will assign a fourth platoon to a company. This is how it is for the Israelis and the Jordanians. Most of the other vehicular units in AIW have the same number of vehicles per counter as their counterparts in Divided Ground, thus conversion is very easy. Where they do not match I make the necessary adjustment. Again as in “Ode to Panzerblitz”, there will usually be more transport units in a Divided Ground scenario than what are called for in the equivalent AIW scenario. This is necessary to carry all of the “invisible” units that are not present in AIW. I also give them the proper type of transport commensurate with these units’ support purpose and I only give them enough strength points to carry their assigned units.

Before leaving the subject of units I need to address the Headquarters and Leader units in Divided Ground. Arab-Israeli Wars does not have these units. So I supplied Headquarter units for each organizational level present in the scenario. These include a supreme Headquarters unit for each side, usually of brigade level, but occasionally of division level. I do not include very many leaders for each side. I ordinarily assign leaders for battalion level or above, although the Israeli and Jordanian forces will frequently have leaders at company level. Frequently the supreme leader will be a command level three one, with the next organizational level down having command level two leaders, and the bottom level if appropriate, will receive command level one leaders. Sometimes I will vary the command level of a particular leader to represent either a historically poor or great leader, but there are no command level four or five leaders in these scenarios.

## **The Scenarios**

There are a lot of considerations when setting up a scenario. The first concerns which side starts the game on the defensive. Forces on the defensive frequently, but not always, receive minefields, blocks, fortifications, and/or improved positions. In Arab-Israeli Wars there three types of minefield; those with 1-1 attack strengths, those with 2-1 attack strengths, and those with 3-1 attack strengths. These easily correspond to the level one, two, and three minefields in Divided Ground. In Divided Ground I give one mine for each mine in AIW, each mine level corresponding to the equivalent attack strength. Blocks are easy as they represent the same thing in each game, therefore there is a one-to-one ratio in blocks between the two games. Fortifications can be tricky. In Arab-Israeli Wars fort counters represent trenches, bunkers, and pillboxes. Generally, if the scenario has fortifications that have been in place for years, then I will use bunkers in Divided Ground, but if the scenario has fortifications that were constructed during the current short term war, then I will use trenches. Rarely will I use a pillbox and only if it can be historically documented. In all cases there is a one-to one ratio in fortifications. In AIW there are improved position counters. These correspond directly to the improved positions in Divided Ground. These are given to the defender in a scenario as listed in the scenario card in AIW. In Divided Ground, the defender gets the same number of improved positions as their counterparts in an equivalent AIW scenario do, but no more. Thus if no one receives improved positions in the initial set up in AIW, then no one gets any in the initial set up in Divided Ground. However, both sides are free to build them during the course of a scenario in Divided Ground.

The next thing to consider is environmental conditions. In Arab-Israeli Wars the environmental conditions are assumed to be perfect with unlimited visibility. So they are given the same advantage in Divided Ground, the weather is clear with a maximum visibility of 20 hexes, no matter when the scenario occurs, unless the scenario special rules say otherwise. However, there are a couple of scenarios that historically occurred at night. These I place in a night environment, though still with a maximum spotting range for muzzle flashes at 20 hexes.

The next thing to consider is the length of the scenario. In Divided Ground, the units move about the same relative distant in a turn as do their counterparts in Arab-Israeli Wars. Thus I keep the scenario length the same in both games, assuming perfect environmental conditions. This even includes the nighttime scenarios as well. The infantry still moves a little faster in Divided Ground than they do in AIW though. However, if some outside players wish the change the environmental conditions to make the vehicles move slower, then the scenario length will have to be increased to give the units the same chances of traversing the board in Divided Ground as those chances in AIW.

In AIW unit morale is handled by assigning a side a certain morale level. When a unit is dispersed, it must roll the die and check to see if it meets the die roll range within its side's morale level in order to become undispersed. In Divided Ground, unit dispersal is handled the same way, only by the computer. There are four morale levels in AIW; Levels A, B, C, and D. Each level has two die roll ranges, one for infantry type units (as

defined by AIW) and one for the rest of the units. To translate this to Divided Ground I established the following morale levels for each Morale Level in AIW.

Level A: 6 for infantry units, 7 for the rest of the units.

Level B: 5 for infantry units, 6 for the rest of the units.

Level C: 4 for infantry units, 5 for the rest of the units.

Level D: 3 for infantry units, 4 for the rest of the units.

In the scenarios, each side is given the same morale level as they have in the equivalent AIW scenarios.

For airplanes, which AIW does have, I just gave each side one plane, usually the best type available for the war in question, for each plane they get in AIW. I also use the same rule for helicopters unless I need more to carry those “hidden” units described in the previous section of this article, and then each helicopter unit only has enough strength points to carry the unit in question.

There are some scenario functions that I assign default values to. For example, for Ammo both sides get 80% availability. Since AIW has smoke rules, both sides each get two smoke rounds for each smoke firing artillery and mortar unit in the scenario. If the scenario occurs at night, both sides get two star-shell rounds for each artillery and mortar unit in the scenario. For the AI, I assign 80% for the attacking side (or both sides in a meeting engagement) and 40% to the defending side.

The last thing to consider is the victory conditions. In the victory conditions in Arab-Israeli Wars victory points are given for destroyed enemy units, friendly units exited off of the board or occupying a particular board, and the capture of certain geographical objectives. The player with the greater number of victory points is the winner and the level of victory is determined by the difference in the winner's and loser's victory point totals. Divided Ground can easily accommodate this. However I replaced the victory condition of units occupying a certain board with various objective hexes in the board area in question. Generally, I usually establish the minimum point total for a minor victory to be between forty and fifty percent of the total point value of the second player's forces, both on board and reinforcements, and the objective hexes in the second player's possession at the beginning of the game.

## **Variations**

None of the scenarios are written in stone. All are unlocked and players are free to make any changes to them as they wish. Recommended variations would include changing the positions of the starting forces or the entry points of reinforcements, changing some of the default values listed above, changing the number of aircraft and their types, adding the effects of environmental conditions, and changing the length of the scenario. Of importance is if the environmental conditions change the nature of the ground, so as to lengthen the time it takes to traverse it, then additional turns must be

added to the scenario length to allow the units the same chances of traversing the area of the map as they would in AIW.

## **Conclusion**

This article has explained most of the rational behind the design decisions that went into the making of these scenarios. I wish to thank the small group of players that have kept Divided Ground alive and viable as a computer game. It is to them that I dedicate my “Ode to Arab-Israeli Wars” scenarios to. Enjoy them.