Demo Instructions

Welcome to TalonSoft's demo for The Operational Art of War!

There are a wide variety of gaming options in The Operational Art of War. This demo has all the features that you will find in the game itself. However, for the purposes of these demo instructions we will only discuss the finer points of the game here that will allow you to enjoy the demo. You might want to make a print out of these instructions, so that you can more easily access them while you get started with The Operational Art of War (or TOAW). At any time in the game you can refer to the Help Menu in the game for more details on other features.

A Note about Sounds and Music

In order to keep this demo to a reasonable download size, the game's normal background music and 'combat' sound files have been omitted, and the remaining sound effects are 8-bit mono. The full game features complete 16-bit stereo music and sounds.

Load The Operational Art of War Demo.

You will see the scenario selection screen. Press the button on the left labeled "Korea 50-51" to select the Korea scenario. The text on the selected scenario's button turns white and the Scenario Briefing notes for the selected scenario appear on the right side of the screen. The briefing contains some general information such as the historical overview and date, but also gives you important game information such as the game scale in terms of the map, time and combat units.

Near the bottom of the Selection Screen is a row of buttons. As you roam your cursor over any button in the game, you will see some information about the button displayed at the bottom of the screen in the Information Panel. The arrow buttons on either end are used to scroll. The arrows on the left will scroll though the list of scenarios when if the list of scenarios exceeds the display area. The arrows on the right are used to scroll through the Scenario Briefing information. Left click on the arrows to scroll up or down by one line; right click on a scroll arrow to move up or down by an entire screen (in effect, "paging up" or "paging down").

Press the third button from the left. It is used to select the "Play Mode", that is, whether the battle is to be fought as:

- 1) Two Player (hotseat),
- 2) Play by Email (PBEM),
- 3) Side One Computer vs. Side Two Human,
- 4) Side One Human vs. Side Two Computer Human, or
- 5) Computer vs. Computer.

Notice that as you press this button you are cycling through the different play modes. The current mode of play is reported in the information panel and the button appearance changes. Continue to press the play mode button until you select the mode that features the "United Nations Computer vs. Human Play".

NOTE: Even though this demo allows you to play the Korea scenario in any "play mode" (as previously described), for the purposes of these instructions please choose the "United Nations Computer vs. Human Play" mode for now. Later, once you are more familiar with the game, you might want to try your hand playing the U.N. forces, or even try a "hotseat" game with a friend.

Next left-click on the "Checkmark" button, to load the game. It may take a minute or two (depending on your PC) before you see the Begin Turn dialog box.

Once the Korea scenario launches you see that you are beginning Communist Turn 1, and the date is 6/25/1950. Press the green button with the word "Begin". The game will then tell you that you have reinforcements. Press the green button with the word "Continue".

The Main Map Panel

When the Korea scenario begins you will see red units that represent the Communist Forces and blue units that represent U.N. troops. You are not able to see all the enemy units in play. Only the known enemy positions and deployment can be viewed.

A single red unit is highlighted in a raised gold highlighted location. This unit is depicted in the top right corner of the screen in the Unit Panel.

If your cursor is placed on a friendly unit, the pointer is shaped like a hand with a pointing finger.

If your cursor is moved to a location within the movement range of the selected unit, the pointer will be a series of concentric white circles. Once the cursor has rested in a location within movement range of a unit, a gray band will extend from the selected unit to the cursor position and the movement cost for each location to be entered is displayed.

If your cursor is beyond the movement range of the selected unit, the pointer will appear as a barred circle.

With a friendly unit selected that is next to a unit from the other side, if you roam your cursor over the enemy, the pointer will become a crosshair if you have enough movement points remaining to launch an attack.

As your cursor passes over any location containing a unit, either friendly or enemy, this unit's information will be temporarily displayed in the Unit Panel (top right corner). Also notice that at the bottom of the screen in the Info Panel, information is given about the location where the cursor is positioned and the terrain type. If the location is within movement range of the selected unit then the Info Panel will display the coordinates as the Destination and give the total movement point cost that the unit will expend to reach this location.

If your roam your cursor to the map edge, it activates the Map Auto-Scroll. The cursor will become an arrow representing one of eight standard points of the compass and the map will begin to scroll. It is not necessary to place your cursor on one of the arrows around the map. Any area in the map frame is "Hot" and will initiate the map scrolling.

The Microview Panel

By now you may have noticed the small "thumbnail" map in the lower right hand corner, called the Microview Panel. On this display you can see a black square that represents the viewing area of the main Map Panel. On some other scenarios, if the Map is particularly large, the Microview may itself have scrolling arrows for one or two directions. Red and blue dots on the map shows the positions of known friendly and known enemy forces. Objective locations are shown by yellow dots.

The Control Panel

Roam your cursor over the buttons that make up the Control Panel on the right side of the screen. The actual number of rows of buttons displayed depends on your monitor's screen resolution, and can vary from as few as two rows of buttons or as many as seven rows. Regardless of display, however, each row has four buttons. As the cursor passes over each button, the function of that button is briefly described in the Information Panel along the bottom of the screen.

All button actions can also be performed by accessing a "popdown" menu item.

The Unit Panel

The Unit Panel located in the top right corner of the screen contains a great deal of information about the selected unit or the unit that the cursor is passing over. Information shown in this panel relates only to a single unit. So in the case where several units occupy the same location, the information shown relates to the unit on top of the stack.

Up to nine friendly units may occupy a single location in a stack. At times however, depending upon the terrain and the units, large stacks may be a disadvantage and cause overstacking to occur.

When viewing 2D icons on the main map, there are three images presented:

- 1) a single unit,
- 2) a stack containing two units or
- 3) a large stack icon that represents 3 or more units.

The difference between the icons displaying two units and a stack containing three or more units can be seen in the counter edges. To determine the number of units stacked in a map location containing three or more units, refer to the image in the Unit Panel where the edge of each 2D icon can be seen.

The 2D icons on the map and in the Unit Panel by default shows two values, an attack and defense strength. The Unit Panel also shows a single representational 3D icon of the top unit in the location and features a background display depicting the terrain in the location.

The top of the Unit Panel displays three lines of text. The top line shows the side, line two is the parent formation, and line three is the unit identification number. At the bottom of the panel the unit's current "deployment" are shown.

Along the left side of the Unit Panel four small buttons can be found:

- 1) The top button contains a colored "+" (health) symbol that shows a combined supply and readiness factor. The colors range from bright green for a unit in very good condition, to light green, to yellow, to orange and finally to red for a unit in poor condition. The colored "+" symbol in the Unit Panel corresponds to the colored dot (or light) in the top right corner of the 2D icon.
 - 2) The unit's attack strength is displayed to the right of the button showing the "crossed rifles".
 - 3) The unit's defense strength is displayed to the right of the button showing a shield.
- 4) The number of movement point available to the unit is shown to the right of the button displaying a "tire".

Pressing any of the above-mentioned buttons will pull up more detailed information about the unit in the Unit Report.

On the right side of the Unit Panel, several optional buttons may appear depending upon the unit's location. These buttons control the unit entraining if on a rail location or loading onto ships if in an anchorage location. Other functions controlled here are things such as blowing up a bridge. When in doubt, if you see anything in the Unit Panel, pass your cursor over it and check the Information Panel for what it may represent.

Back to the Game...

Scroll your map a to the left, all the way to the west edge of the map. You will see a Communist stack (in hex 5,37) next to a couple of U.N. units that are isolated on a small peninsula just south of the city of Haeju.

Left click on the two Communist units in 5,37. The location becomes highlighted with the raised brass-colored outline. Look at the Unit Panel in the top right corner of the screen. You have selected the Communist 6th Division, 15th Infantry Regiment.

Left click on the location again, and notice the other unit in the location now appears on the top; it is the 5th Artillery of the 6th Division. You can tell from both the map and the Unit Panel that two units occupy this location. Left click on the location again and the 15th Infantry will be back on top. Left clicking on the stack cycles through the units in the location.

Notice that some locations nearby are highlighted with a "steel" color. These locations contain other units of the same formation, in this case the 6th Infantry Division. For a location to be highlighted in "steel", it needs only to contain a single unit on the same formation as the selected unit. At this point in the scenario, units are fairly well organized. But as the fight progresses you will want to watch how many formations you place in any stack. Things can easily get confusing if you are not careful.

The other steel-highlighted units contain the 6th Division HQ unit in Sariwon (location 7,31), and the 13th and 14th Infantry of the 6th Division near Kaesong (actually in location 12,37). These five units together make up Communist 6th Infantry Division. All five are listed in the Formation Report for the NK 6th Division. Left click again on the Infantry units in 12,37. Remember, as you roam your cursor over the map the location appears in the Info Panel at the bottom of the screen. Click on the location again.

The important lesson to learn is that when flipping through larger stacks of units you must watch carefully. Some stacks may contain two units with the same combat factors. You may think you have cycled through the stack, but could possibly have missed a unit or two by focusing only on the icon combat factors.

Attacking 101

Move your cursor back to location 5,37 (the place where the 6th Division has the infantry and artillery unit). Left click on the location to select it and place your cursor over the U.N. unit to the south in location 5,38. The mouse pointer now appears as target cross hairs. Right click and you will see a menu. The first group of items, Single Unit Attack and Single Group Attack will launch an attack on the U.N. position for the purpose of occupying the location. The second group, Single Unit Limited Attack and Single Group Limited Attack, deal with unit(s) being designated to attack without advancing to occupy the defenders' location. A unit participating in a Limited Attack adds half its strength to an attack, but only suffers half losses.

All attack options have a cascading menu where you select the level of acceptable losses. Options are:

- 1) Minimize Losses,
- 2) Limit Losses, or
- 3) Ignore Losses.

The Ignore Losses option should be used sparingly. For our purposes select a Single Group Attack with Limit Losses. Notice that once a unit is designated to attack, a small gold triangle will appear on the 2D icon with the apex pointing in the general direction of the location being attacked. Two dots (or pips) will appear on the left side of the 2D Icon denoting Limit Losses status.

Left click on the location to place the artillery on top. Right click and cancel single unit attack. Note the brass-colored triangle disappears. Now with the artillery unit on top move your cursor over the U.N. stack and

select Single Unit Attack with the option Minimize Losses. You see it is possible to launch an attack with different units having different levels of acceptable losses. Also note the group options are not presented when only a single unit attack is possible.

Now left click on the attacking Communist units and see that the 5th Artillery now has only one dot or "pip" on the left side of the 2D icon indicating that the loss emphasis has been set to Minimize Losses. Had we selected Ignore losses, there would be three pips displayed on the unit.

The "Plan an Attack" Display

In TOAW, combat operations can get complex with stacks of units from adjacent locations attacking in different directions. To assist you in understanding more complex battles, let's look at the "Plan an Attack" dialog in this fairly straightforward attack. Open the display by right clicking the UN-occupied location to be attacked and select the Plan an Attack option from the menu.

The "Plan an Attack" display is a blow up that shows the location being attack and the six surrounding locations as large squares with the 2D unit icons laid side by side. The brass-colored triangle on the 2D icons shows the units that are attacking, with the triangle pointing toward the location being attack. Beside each 2D icon is a brass-colored flag that indicates full cooperation. A steel-colored flag indicates limited cooperation where a penalty would be applied but the attack permitted. A unit displaying a black flag is not permitted to cooperate in an attack, but will defend together with a penalty. In TOAW it is important to keep your formations together to maximize the effectiveness of their attacks.

In the lower left corner of the display you will see the combined attack strength of your attacking force. In the lower right corner you may see an estimation of the defender's strength, depending on the information known about the enemy.

In this case we see that we likely have sufficient force to prevail in this attack. In fact, you can see in the Info Panel of the Plan an Attack Dialog, that "the probability of success is good". However, should we have any available artillery units within bombardment range or air units that could reach the target location, they would be displayed along the right side of the dialog box. As with any unit in the "Plan an Attack", you need only left click on them to add or remove the colored triangle and thus have the unit assigned or unassigned to the attack.

The last element in the display is the "Time Expended" box to the left of the Support units. Roam your cursor over this area and look at the Information Panel. You see that this attack will take up approximately 10% of the current turn if the combat is resolved at this point. In general, the more movement points an attacking unit has expended prior to making an attack, the more of the turn that will be used when the battles are resolved. It is important to understand that the time expended is an estimate only. Some battles can last much longer than expected.

When do I "Click here to resolve all attacks"?

The "Click here to resolve all attacks" button on the Control Panel is used to initiate all planned attacks. One of the more difficult concepts to master in TOAW is the idea that if you do not move every unit as far as possible and attack with every possible unit, you may get an extra round or several more rounds of attacking, and moving and attacking again.

We have planned a single attack above, and if we press the button on the Control Panel now to resolve this single battle, we will surely get another phase to move and attack. However, if we do elect to resolve this single battle now, all our remaining unmoved units will have their movement allowance reduced to reflect the passage of time. The reduction would be a percentage based on the time that elapses while the battle is in progress. In this case about 10% of all other units' movement points would be lost for this turn.

On the other hand, if you move all your units so that they will not lose movement factors, then more of your turn could be expended while the combat is resolved. This will result in less movement remaining and thus less chance to exploit a success.

It takes practice to find the right balance. To create an opportunity for your units to exploit you must move units. But by moving units too far at the start of your turn, you may stifle your chance to exploit an opportunity created in your first round of combat.

For now, let's not resolve the combat yet. We'll plan a few more attacks and move some units to the front line using at least part of their movement allowance before we resolve combat. For now let's consider a plan for troops east of where our first attack is planned.

On to Seoul via Kaesong - the Attack Down the Coast

Locate the Communist 1st Division by roaming your cursor over the troops at the front line near the Yellow Sea. This division is located along the rail line from 11,36 to 11,37. Use the Unit Panel to view the unit

formation information as you roam your cursor over the units. Alternatively you can locate the division using the location coordinates given above as displayed in the Info Panel.

Left click on the location 11,37 and notice the brass-colored highlight that indicates that location. You can see other units of this formation with a steel-colored highlight in one other location -11,36, directly above 11,37. Using one of the methods explained earlier, call up the Formation Report for this division. You can see the Communist NK 1st Division consists of an Armored Regiment (the "203rd Tank"), three Infantry Regiments, an Artillery Regiment (the "7th Artillery"), and the divisional HQ. Proficiency and supply look good, but the support scope is listed as "Internal". This means that if you mix units of other formations in the same attack with units of this 1st Division, a penalty will apply.

Left click on the selected location and cycle each unit to the top of the stack. This location contains an infantry regiment with an 11 attack strength, an armored regiment with a 12 attack strength, another infantry regiment with a 9 attack strength and an artillery unit with a 6 attack strength. With the artillery unit on top of the selected stack, move your cursor over the U.N. unit two locations away and note the pointer becomes a cross hair.

The artillery unit is capable of attacking by itself from a range of two. Such bombardment attacks are generally not as effective as an assault, but it is an option! Open the Unit Report with a right click. You will note at the top of the report, the attack strength of the unit is 6. However, in the strength section, the artillery is listed at 2 with a range of 2. If you look closely at the three weapons that make up the artillery unit by clicking on the buttons at the left of the report, you will see that it is the 122mm Guns that give this unit the ability to bombard from a range of two. The other two weapons, the 76mm Gun and the SU-76 are not ranged weapons, hence the unit will not fire at full strength from the two-hex range.

The best place to put the 1st Division into action is probably along the coast directly south of its current position, attacking southeast toward the RK (Republic of Korea) 12th Infantry Regiment in Kaesong.

If you are having trouble reading the place names on the map with the units visible you have two options. You could make the units invisible using either the button on the Control Panel or the appropriate menu item. This will allow you to study the map unobstructed. Alternatively, you could press the button on the Control Panel that changes the place names from "visible" to "floating". Floating place names bring these map labels on top of the units. There are several buttons that can be used to "float" map features such as airfield, anchorage locations and objectives above the units.

With the 1st Division unit in location 11,37 highlighted, place your cursor in location 11,38 on the coast. The pointer will become a concentric circle and a gray band will extent into the location with an arrow on the end of it. If you move the pointer off the center of the location you will see it costs 4 movement points to enter this location. Also in the Info Panel you can see the destination location, total movement cost and the message which says "right click to order the movement". Right click now and select Group Move to execute the movement order. All units will move and occupy the destination location.

Select the Division HQ and the reserve regiment in location 11,36 and move them to 11,38 with the same method used above. Now that is a lot of combat power in a single location but not too much for this scenario. The force should easily overwhelm the U.N. unit in 12,38 and capture Kaesong. With a Communist unit in 11,38 selected, move your cursor to Kaesong (location 12,38), right click and select "Single group attack", then choose Limit Losses.

Had you selected "All units attack" in the step above, all friendly units next to Kaesong would have been ordered to attack. This would include the two Infantry regiments of the 6th Division in location 12,37. As the 1st Division and the 6th Division are both formations with an "internal" support scope, this would trigger a penalty in the attack. In TOAW it is always a good thing to keep your formations together where they can support one another within their command structure. Open the Plan an Attack screen on this battle and note from the Info Box that our losses in this battle are expected to be light.

Now select the two 6th Division infantry regiments in the adjacent location (12,38) and attack the U.N. in location 13,38. Open the Plan an Attack screen on this battle and note in the Information section that losses will be a bit higher ("expected to be moderate") but this is acceptable. For now, just to give this battle some extra assistance, click on one of the Air Units in the Support area of the dialog. This will single out this attack for special attention from your air assets. It will also change the Air Units orders from a Combat Support role on the entire front, into a focused Assault along with the other ground troops into this particular battle.

Watch those Stacks!

Moving inland, locate elements of the 3rd Division, which are poised to attack south down the rail line toward Uijongbu. Several units of this division are already in position to attack. Select the division HQ and the reserve Infantry regiment in location 15,36 and move them both to location 15,37.

Now select the Engineer Unit in location 15,35. You can see by the silver highlighting that this unit is not part of the 3rd Infantry Division. Open the Formation Report for this unit. Notice the engineers are part of the NKPA Formation that has an Army Support Scope. Therefore it should be able to cooperate in battle with the 3rd Division without the penalty we discussed above. Move the Engineers to location 15,37. Right click now on location 15,38 and pick the "Plan an attack" option.

This display has quite a few more units and you should now start to see how this screen will be very handy. All the units in this rather larger stack are displayed side by side so you don't have to cycle through the stack to determine what you have to do, to plan your attack. Also, you can see all friendly and enemy units in adjacent locations. As you roam your cursor over each 2D icon you can see the unit ID and formation in the Info Panel. Furthermore you can tell by the gold flags next to the seven units (the engineers and the other 3rd Division units) that these units will cooperate with no penalty as we suspected when we ordered the Engineers to advance.

Left click on the engineers and the other six units that make up the 3rd Division (all the units with the gold flags). You will see a gold triangle appear on the icon as you click on each and assign it to the attack the target enemy location. Move your cursor off to the side and you see in the Info Panel that the probability of success in this attack is excellent. Close this screen when you are finished.

With seven units in this location you can see in the Unit Panel that the stack has really grown quite large. It is not prudent to pack too many units into too small of a space as the target density will cause your battle losses to be excessive. But this location hasn't gone too far yet - not for this scenario anyway.

Select the 4th Division HQ from location 14,36 and perform a "Single unit move" into the large stack in location 15,37. This is really not a bad location for a motorized HQ on a road to exploit a breakthrough.

Now select the infantry regiment from location 14,36 and move your cursor back to location 15,37. Notice that a large colored dot appears on the left side of the destination location to alert you that a potential "overstacking" situation will exist if you execute this move. In some cases this high unit density may be required for a concentrated attack. In some situations, this high unit density may appear with few units. It is all a matter of the scenario's scale.

In this scenario and in this situation, discretion is advised. Best to not order this move. In fact, we will leave this unit in place for now while we consider other options.

A Look at Movement

As in most games of this type, movement cost will vary depending on the type of terrain being entered and the type of the unit doing the moving. In TOAW movement into locations adjacent to enemy units can cost up to 25% of the unit's original movement allowance. Movement into unknown enemy territory costs up to 10% of the unit's original movement allowance. Furthermore, moving away from the enemy (attempting to "disengage") quite often ends in failure - yet with movement points expended and units not being able to execute their orders.

Movement points can be viewed in several places:

- 1) the bottom left number in the Unit Panel
- 2) at the top of the Unit Report, and
- 3) in the Formation Report.

However, when moving units it is often best to display the remaining movement points on the actual 2D icon in place of the attack/defense factors. This is particularly important when you are moving troops and yet wishing to leave a percentage of their movement for a possible second phase or an exploitation phase.

In hopes of getting a second round of moving and attacking, we want to take care to only expend no more than (approximately) half the movement points of each unit moved. Keep in mind that this in itself may not be enough to be certain of a further round of moving and attacking as the time required for resolution of the various attacks is only estimated. Battles may last longer than expected and your carefully made plans can go awry very easily.

Toggle the 2D icons to show movement points by pressing the third button on the top row of the Control Panel. Alternatively you could use the option from the appropriate menu. With the single movement points showing you will have a much better feel for how far you should move units and still leave half the movement points remaining. Also keep in mind that the recommendation to save half the movement points is a "ball park" figure and is based solely on the desire to get at least one more round of moving and attacking. The more units you move and the farther you move them, the more of your turn you will expend. You may wish to experiment with different formulas in this or any other scenario or situations.

With the 2D icons displaying movement factors, locate and select the 93rd Motorcycles in location 22,37. With 37 movement points, this unit will be very handy when it can break out into open country. Furthermore, if you consult the Unit Report for it, you will see that it has a high reconnaissance rating. That means it has a greater chance of determining the strength of any unseen enemy units it may encounter. This makes it ideal to scout the way for your advancing army. There is no certainty that you will determine enemy strength with the reconnaissance unit. Each encounter is handled individually and is based on many variables.

With the 93rd Motorcycle on top of the stack in location 22,37 position your cursor in the location to the south. This single location move will cost 18 points, but the unit will cut the road and be in the position to breakout toward Woniu (18,40) in the next round of move and attack.

There are other battles that you may wish to consider planning along the front. But for now, let's consider moving some of our rear area forces up to the front as fast as possible.

Got a long way to move? Consider taking the Train!

In the Microview panel notice the red dot indicating friendly forces, way up near the border with the USSR (top right corner). Left-click on the Microview panel to move up there quickly. Left click on the location (30,9) and cycle through the stack. There are three infantry regiments here that make up the 9th Division. With 22 Movement points, these units will be several turns reaching the front line by conventional (road or "cross-country") movement. Furthermore, with breakdown and stragglers, the units arriving at the front would be somewhat depleted even before they went into battle. However, they are on the railroad tracks! Ever consider using the train?

Pass your cursor over the right side of the Unit panel where you see a button. In the Info panel you can see the message "click here to board the train". Press the button now. Note that the unit icon changes to reflect the entrained status. The big change is in the movement rate. It has jumped from 22 to 280 hexes.

Cycle the other two regiments to the top of the stack and entrain each one in turn. Now the whole division can move down to the front in a single turn. They will not be able to move off the railway lines this turn and in fact will have to remain entrained. They may also face enemy air interdiction along the way, but it sure is a fast way to move troops long distances!

Use the Microview panel to jump back to the front. Pass your cursor over any rail location and the gray movement trace will appear. Right click on a rail location close to the battle to execute this move.

And So On...

You still have much to consider here in this battle before you press the first "Resolve all attacks". Don't forget we left the 4th Division in place. You may want to give them some orders.

There are other concepts that we have not discussed here. But the preceding "lessons" should give you the basics.