

# ***A GUIDE FOR CAMPAIGN AND MISSION PLANNING (PART II)***

**BY HAWK**

**WITH THE HELP OF ALL OF MY FRIENDS AND MATES AT**

**MULTIVIPERS**

**TEAM SPEAK AT IP: [63.252.188.123](http://63.252.188.123)**

(Contact Host or Server Administrators for *server* information and password)

*It is with my most heartfelt appreciation that there exist MultiVipers multiplayer server so that people from around the world get to plan, share, and experience the flight simulation Falcon 4 and the subsequent 2005 release of Allied Force.*

*Part one of the Mission Planning and Campaign Management Guide will be found here:*  
<http://www.multiviper.com/viewtopic.php?t=57>

## ***THE GROUND WAR***

The ground war is second in importance only to the air war. Without the benefit of friendly ground forces, the player cannot win the campaign. Without the *enemy* having ground forces, the *enemy* cannot win the campaign. Ground force movement is of paramount importance and should not be taken lightly. The player should not consider ground forces as *expendable* even though the player will loose many ground force units while pushing forward to achieve the objectives, whatever the objectives at the time may be. Through head-to-head contact, enemy air attack, and normal attrition the player will loose many ground force units. Little may be done about attrition but there is a great deal that can be accomplished with the remaining two. *The air portion is conducted through air operations and by achieving and maintaining air superiority.* Keep the enemy's airframes from getting airborne and the player protects his ground assets. Let the enemy fly freely and the players' ground forces will rapidly disappear. The last is head-to-head contact. *Head to head contact should be avoided at all costs and when it does occur, the player needs to make sure that the proper support elements are there to protect the advancing ground forces as much as possible.* This means that the player has to have air superiority to keep the enemy attack aircraft out of the picture, needs to provide air coverage for the advancing ground forces, and needs to make sure that all available assets are being used to the best and fullest extent. These assets are both air and ground assets that consist of attack aircraft and attack helicopters and ground assets that include *Multiple Rocket Launch Systems (MRLS)* and other *Artillery*, whether self-propelled or not. Artillery is one of the most powerful ground assets that are available to the player and the enemy alike.

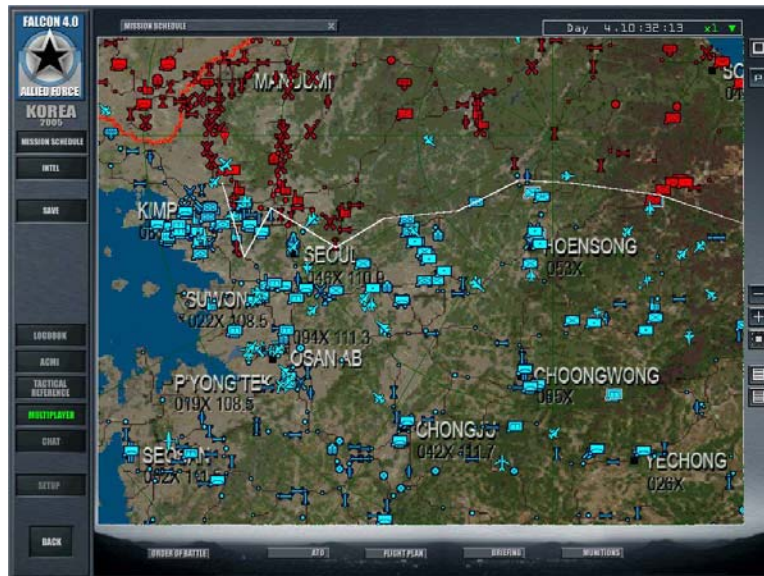
Prior to the player taking control of the ground war, it is in the players' best interest to know exactly what these ground forces are and how they support the battlefield operations. The *Order of Battle (OOB)* will locate all of the ground forces in the battlefield for both friendly and enemy forces. If the ground unit is not in the OOB, it does not exist. There is a caveat to this though. Incoming ground force units will not show up in the OOB until they have actually arrived in the theater of operation. *There is also no way to ascertain*

*what ground force units are inbound and as such, the player has ZERO idea of what ground assets he can rely on to reinforce the FLOT.*

Lead Pursuit has revamped the ground war operations by allowing the player to have more control over ground force movement. Lead Pursuit has also added some engineer units that actually repair things instead of just sitting idly. No longer is the player at a loss as to how a bridge or airfield will be repaired. This was accomplished by adding *Engineer Repair Units* to the theater of operations. The engineer repair units differ in a critical way from other engineer units. Within the engineer repair unit inventory are the *M88A2 IRVs*, which are tank recovery vehicles that have bulldozer blades attached to them and thus should be able to repair runways. Other ground assets have been upgraded to more current standards which has resulted in a better chance of a win in head-to-head contact. One of my biggest pet peeves in the past about ground force movement has been the insanely derived method that ground units go from one place to another. No longer will a ground unit go from Seoul to Koksan via Kimhae and take three days to do it. Units will also take the route that requires the least amount of time to get there. Units avoid destroyed bridges but they also have no qualm about going through 3 enemy armored battalions to get to their destinations which usually ends up with the unit being demolished by the enemy with out so much as a wink of the eye. While there are still some suicidal movements attempted by ground units under control of the Headquarters, the player has better control as the ground unit will not be delegated back to Headquarters control unless the player so desires it *once it has been delegated a task from the player*. This is a powerful tool that has been made available to the player. While Lead Pursuit has made leaps forward in the ground war, there are still some things that need to be addressed. One of the biggest is the disappearing unit bug that has resulted in another battle front that the player has to consider. Friendly ground force units have a habit of ‘bugging out’ of the campaign never to be seen again. Lead Pursuit is looking into this and hopefully they will have a solution to the problem *when and if* another patch is released.

Ground forces in the campaign are split into two distinct categories. These categories are support operations and battlefield operations. It is important that the player be able to identify units by their map symbology and know the capabilities of the ground unit. If the player does not understand the map symbology, the player may end up sending an *Engineer Supply Unit* to do battle with an enemy *Armored Battalion*. Guess which unit is going to win this battle? Support operations consist of Engineer and Air Defense Units. Engineer units can be separated into three categories: engineer (repair), engineer (supply), and engineer (fuel). Air Defense Units can be broken down into two categories: *Patriot/NIKE/Mistral* this includes enemy surface to air missile systems (SA2s, SA-3s, etc) and Air Defense Artillery which consist mainly of guns that will put bunches of FLAK (*AAA Anti-Aircraft Artillery*) into the air. Battlefield operations units are everything else.

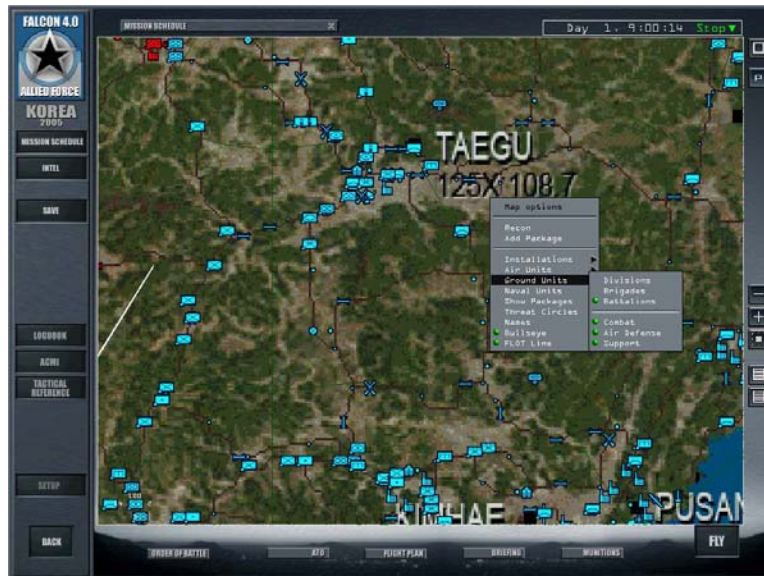
The Mission Planning Map is the place to keep an eye out on both friendly and enemy forces. While friendly forces usually remain on the Mission Planning Map, enemy ground forces very rarely are displayed in totality on the Mission Planning Map. The player has to find them and this can be achieved through the OOB or Battlefield Reconnaissance. Remember that the OOB is *foggy* on enemy ground units but it is crystal clear in the area of friendly ground units. As mentioned earlier, friendly and enemy units will be displayed when there is head-to-head contact, over-flights of friendly and enemy units by friendly airframes, and with the help of Intelligence gathering airframes such as JSTARS, U2/TR1s, and MD500 Defender Helicopters.



### *Map Symbolology*

Map symbology is important and the player should be able to look at any symbol on the map and immediately identify the type of unit and how the unit will be best utilized for offensive or defensive ground operations. The symbology that Lead Pursuit uses is adequate to the task but many ground force units on both sides are missing and I suspect that this is due to the software constraints that they have to live within. It is a good mix of ground forces for this simulation though. The Mission Planning Map will allow the player only to view

*Divisional, Brigade, or Battalion* assets. Within each of these categories, the player can select the level of ground unit activity that he wishes to see by selecting to view *Combat, Support, and Air Defense* units. This is accomplished by mouse clicking on the Mission Planning Map and selecting Ground Units. Further selection of Battalions and then Combat, Air Defense, and Support will allow the player to see the critical units involved in ground operations. Although there are Division and Brigade units these are 'non-players' for the most part. They cannot be moved or *Air Mobilized* by the player and as such are of little value except they move when they want and where they want. The player will not see this happen with the Battalions option selected.



### *Friendly Units*



*Headquarters Element (very lightly equipped – for capturing political sites and bridges)*



*Infantry Battalion (heavily equipped – for battling enemy infantry or lighter units)*



*Mechanized Infantry (lightly armored, heavily equipped – for battling mechanized infantry or infantry)*



*Rocket Artillery (lightly armored – behind the FLOT, very long range)*



*Self-Propelled Artillery (Heavily armored – near the FLOT, ~ 9-mile range)*



*Air Assault Battalion (very lightly equipped – near or behind the FLOT operations)*



*Light Artillery (artillery pieces – near or behind the FLOT within weapons range)*

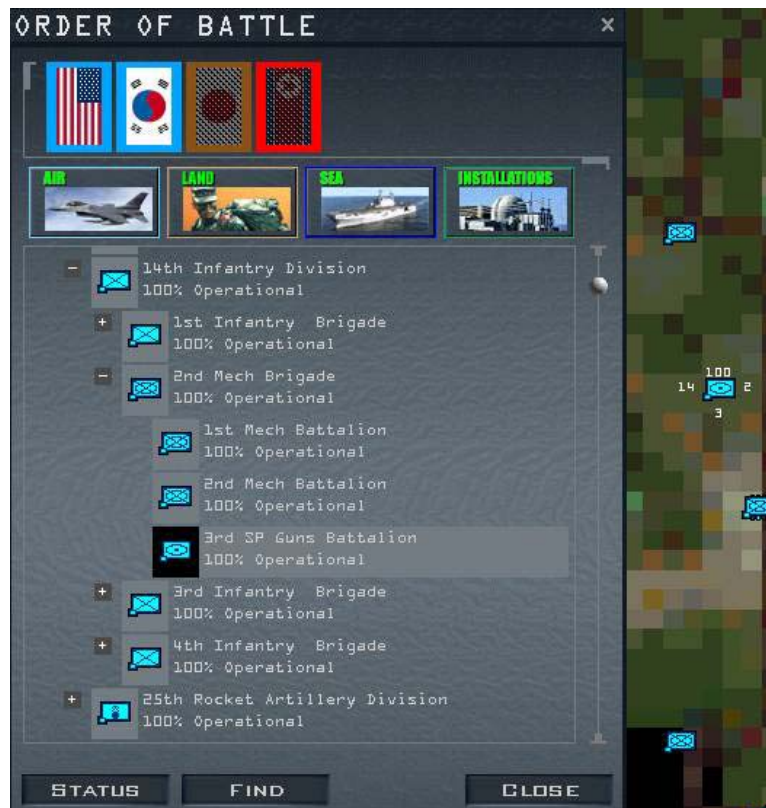


*Air Defense Artillery (SAM/AAA guns – Patriot and Nike near strategic sites, AAA strategic/ground units)*



*Armor Battalion (heavily armored – at the FLOT or in the mix of things but only with proper support)*

This is not an all-inclusive list. Other units such as special operations battalions are in the theater of operations. Study the map symbology and what it stands for. It will assist the player greatly while managing the ground war and assigning the proper attack airframes to ensure battle supremacy. One last note about the map symbology. The numbers around the ground unit icon provides the player with an immediate status of that particular unit. As an example, I have selected the 3<sup>rd</sup> Self-Propelled Guns Battalion. The number 3 at the bottom of the icon indicates that it is the 3<sup>rd</sup> SP Guns Battalion; the number 2 indicates that it is subordinate to the 2<sup>nd</sup> Mechanized Brigade, while the number 14 indicated that it is subordinate to the 14<sup>th</sup> Infantry Division. The most important number is at the top of the icon and it indicates the units' *current strength, which* in this case is 100%. The only way to get the numerology of the ground units is to have the Mission Planning Map *Names* on or to locate the unit in the OOB and highlight the particular unit then press the find key. Names work the best while the Mission Planning Map is zoomed in to maximum but when there are many units in the vicinity that many names being displayed will cause confusion. Alternatively, the player can just mouse click on the unit and check the status. The critical elements of the unit are then visible without the hassle of searching the OOB or doing the Mission Planning Map *Names* option. There will be times that you will have to search through the OOB to find a specific unit that is not being displayed on the Mission Planning Map.

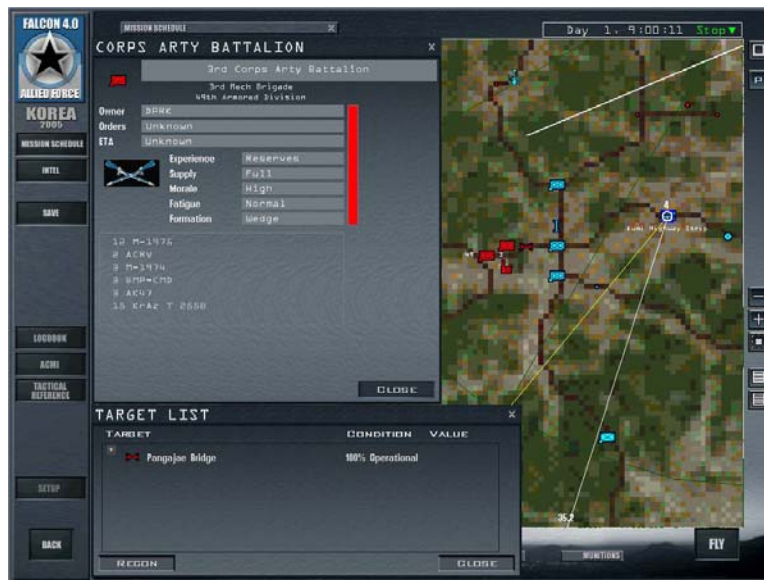




*Lead Pursuit needs to take notice that when there are several units at any given location (an airfield for example), the unit icons will stack upon one another. This prevents the player from seeing all units at a given location unless the OOB is thoroughly searched or the top most unit icon is moved from the target of interest allowing the next unit icon to be seen. This is time consuming and provides no benefit to the player. A solution that is recommended on a Forum would be to cascade the unit icons or display the unit icons with tails that center on the target of interest.*

In the realm of ground war operations within the simulation, towed and self-propelled artillery is by far the most devastating attacking force of both friendly and enemy ground forces. Expecting to eliminate an artillery unit with an armored or mechanized infantry unit will result in a swift and decisive loss of the players' battlefield assets. The most important piece of information that the player can be exposed to is *do not engage enemy ground forces in any head-to-head contact. Let the airframes within Allied Forces do the work of destroying the enemy ground forces. The following question should be answered – what am I gaining in operations by making this move.* Airframes for this task (again we are speaking about the Korean and not the Balkans Theater) consist of both fixed and rotary wing aircraft. Fixed wing aircraft for this task are the *A10s, F16s, F15Es, and FA18s.* The list of airframes will change drastically in other campaigns and other theaters of operations. The player should take note that rotary wing airframes are by far the best airframe to utilize against enemy armor, artillery (both self-propelled and towed), and mechanized infantry. Rotary wing airframes are the players' most powerful battlefield engagement attack aircraft.

### ***Preparing for the Battle***



A quick view of the Mission Planning Map shows that there are three friendly mechanized infantry battalions that are under threat by the 3<sup>rd</sup> Corps Artillery Battalion. Swift action must take place to neutralize the 3<sup>rd</sup> and its associated units. The M-1975 vehicles that the 3<sup>rd</sup> has are a self-propelled 120mm mortar that fires a variety of munitions with an effective range from 1,000 to 13,800 yards. This unit has the capability to destroy all three friendly Mechanized Infantry Battalions and must be *eliminated* from the battlefield. The units' location was discovered by the proximity to the friendly forces and by the MD500 Defender helicopters that are starting a battlefield intelligence mission. Co-located with the 3<sup>rd</sup> Corps Artillery Battalion is the 3<sup>rd</sup> Mechanized Brigade (a HQ element) which is subordinate to the 49<sup>th</sup> Armored Division

(also a HQ element) but the 49<sup>th</sup> location is unknown. There is also a sister unit the 2<sup>nd</sup> Mechanized Battalion but its whereabouts are unknown at this time. The missing pieces are the 2<sup>nd</sup> and the 49<sup>th</sup>.



By utilizing the OOB, we should be able to locate the missing elements. MD500's have to be airborne or else they do you no good. While the AI mission planner does an adequate job of getting these assets airborne the AI never seems to direct them to the places that they are needed. As there is a MD500 Recon in the area, by clicking on the 49<sup>th</sup> Armored and selecting *Find* within the OOB window the 49<sup>th</sup> will be displayed on the Mission Planning Map if it is in the area. *This is the only way that you will find the Brigade and Division units while the Battalion option is selected as a Mission Planning Map option.* As a bonus, the mission planner found the sister 2<sup>nd</sup> Mechanized Battalion under the 3<sup>rd</sup> Corps Arty icon. *This is an example as to why the unit icons need to be cascaded or center off set. The player never knows what unit is hiding under another unit.* The only unknown at this time is the strength of both the Brigade and Division Headquarters Elements. The OOB states that there is no status on them and all we have to work with is the Recon Photos. The Recon Photos show nothing for either of the Headquarters so I will discount attacking them at this time (I also believe that the enemy headquarters elements actually have no assets unless it has the map symbol HQ. It is time to send up some attack helicopters and aircraft.



### *The Planning Phase*

Much like the air war planning, battlefield planning is based on the same characteristics. The only difference is that the player does not really want to go back for additional battles unless he has to. To avoid a scenario such as this the player should consider what type of attack assets are available and utilize the proper amount of airframes needed to accomplish the job. Remember that attack helicopters are designed to do this type of job. Keeping this in mind and the fact that the 2<sup>nd</sup> Mechanized Battalion is co-located with the 3<sup>rd</sup> Corps Arty there is a lot of *steel* there that needs to be eliminated. Because these forces are on the offensive they should be moving and be in a wedge or column like formation. There is a bridge that the enemy needs to cross which means that they are most likely in a column formation. Column formations are such a pretty sight for a F16 virtual pilot. There is also the prospect of some AAA being a threat to the players' aircraft. Intelligence in this area is sketchy at best and there could be conditions that the player has not considered. A *SEAD Escort* loaded for AAA will have to be made available. As Echoing and R601 airbase are within 40 miles of the target area, a requirement for a *DCA*, *BARCAP*, *Sweep*, or *Escort* flight may exist. There are no enemy aircraft reported in the OOB as being operational at these airbases so the mission planner should consider what the air threat could be at the time the attack packages are over the target area.





*Intercepts* can handle any incoming threat aircraft providing the airframes are accessible and someone is in the multiplayer 2D world monitoring the Mission Planning Map. In single player mode, the player has to rely on the AI. There are BARCAP's in the area of operations, there is an AWACS scheduled for takeoff immediately, and another AWACS is scheduled for takeoff at the 0930 hour. The 3<sup>rd</sup> Corps Army consist of 12 M-1975 Artillery Pieces (hard targets), 3 M-1974 Self-Propelled Artillery Pieces (hard targets), and 15 KrAz T 225 Bs (soft targets). The 2<sup>nd</sup> Mechanized consist of 7 T-62s (hard targets) and 14 VTT-323s (semi hard targets).





There are ancillary vehicles that can be cleaned up by follow on attacks if needed. There are at least 52 individual targets that have to be destroyed to eliminate the threat posed by the entire 49th Armored Division. As a last resort, the bridge at Pangajae will be destroyed if the attack is unsuccessful and deemed a failure. This will halt the enemy's advance but it will be most costly in terms of time when it comes to moving the friendly ground forces forward. Remember only certain engineer units can repair things and it takes around 40 hours to get a single spanned bridge repaired.

### *Selecting the Airframes and Ordinance*

The mission planner will require two F16Cs/F15Es to *Strike* and destroy the bridge if necessary. *This flight will be decided by the outcome of the upcoming battle and therefore is set to Strike the target after the Pre-Planned CAS missions return to base. It must be built at the same time as all other missions so that it will be in the ATO if necessary.* An additional two F16Cs/F15Es for the *SEAD Escort* may be tasked if required. No BARCAP's Sweep, Escort, or DCA as this is directly over the FLOT and the player controls the air in this area. Eight F16Cs/F15Es for the Attack package (4 per unit). Two A-10 for FACs (1 per pre-planned CAS package). Eight AH64 Apache Attack Helicopters (4 per unit). Eight UH60L Blackhawk Helicopters (4 per unit). This would leave the player the AH1 Cobra, UH60L Blackhawk, and A10s available for the follow-on attack or other air to ground operations.

Aircraft Count: 4 F16C Pre-Planned Combat Air Support 3<sup>rd</sup> Corps Arty  
 4 UH60L Pre-Planned Combat Air Support 3<sup>rd</sup> Corps Arty  
 4 AH64 Pre-Planned Combat Air Support 3<sup>rd</sup> Corps Arty  
 4 F16C Pre-Planned Combat Air Support 2<sup>nd</sup> Mechanized  
 4 UH60L -Planned Combat Air Support 2<sup>nd</sup> Mechanized  
 4 AH64 -Planned Combat Air Support 2<sup>nd</sup> Mechanized  
 2 F16C52 SEAD Escort  
 2 A10 Forward Air Controllers (FAC)  
 2 MD500 Recon Patrols

Ordinance Required: F16C Pre-Planned Combat Air Support  
 6 MK20D for the soft targets.  
 2 CBU97SFW for the hard targets.  
 1 ALQ131 ECM

2 AIM120B Slammers  
2 Aim9 (M or X)  
No drop tanks.

F16C SEAD Escort  
4 CBU71s  
2 AIM120B Slammers  
2 Aim9 (M or X)  
1 ALQ131 ECM  
No drop tanks.

F16C Strike (may not be required)  
6 MK82  
2 AIM120B Slammers  
2 Aim9 (M or X)  
1 ALQ131 ECM  
No drop tanks.

A10 Forward Air Controller (FAC)  
2 AIM9Ps  
8 BSU49  
6 MK82  
2 LAU-3H /HE Rocket Pods  
1 ALQ199 ECM

UH60L Blackhawk Pre-Planned Combat Air Support  
2 LAU-3A /HE Rocket Pods

AH64 Apache Pre-Planned Combat Air Support  
16 AGM144s

MD500 Defender Patrol  
12.3mm

Knowing that the AH64 Apache Helicopter are coming from Pohang Airbase the mission planner will have to set the attack based on mop-up times instead of attack times. The mission planner wants all attack helicopters and the patrol helicopters over the target area at the 0945 hours. This sets the time for the attack aircraft and SEAD Escort aircraft. The mission planner sets the time for the fixed wing CAS at 0930 hours giving the aircraft 15 minutes over the target area prior to the rotary wing aircraft arrival. This leaves 10 minutes to flight times and mission building. As this is a new campaign that has just started the mission planner is able to enjoy the luxury of stopping the clock to correct the ATO. *This task is not to be taken lightly. The ATO must be monitored closely as there will be many suicidal missions that will be tasked by the AI mission planner that will require deletion from the ATO.* In this campaign the mission planner spent about four hours ‘tweaking’ the campaign ATO prior to running the clock so that the ATO could be ‘scrubbed’ and rebuilt to meet the short term goals.

### ***Aircraft Package Building***

Selection of the attack aircraft has just as much to do with availability of the aircraft versus the ordinance that the airframe is capable of carrying. Ordinance is not a problem. Aircraft are. Aircraft within the campaign are extremely limited and possess a high commodity value in terms of the overall *flavor* of the campaign. The mission planner may substitute aircraft types for the SEAD and Strike packages but there is no avoiding the use of the attack helicopters. Attack helicopters can carry the battle to the enemy while the lessened complement of available aircraft complicates the air war. Package building begins with the Mission Planning Map. Off button mouse clicking on the target within the Planning Map will open the *Add*

*Package window.* The mission planner will set the *Time over Target* and *lock it* for 0945 hours. Selecting *New* will open the *Add Flight* window and its sub-menus. The mission planner will start with building all the rotary winged packages. These include the AH64s, AH1s, UH60Ls, and the MD500 Patrols. Each of these missions will be a *Pre-Planned CAS* because the specific target is known and will be assigned to each package. The MD500s will Patrol the area sighting targets for the attack helicopters. *Well, I hope they do!* The option of *On-Call CAS* is only useful if you have a *Forward Air Controller FAC* and hopefully *FAC* operations will be addressed in the upcoming release.



Notice that the mission planner selected the 2<sup>nd</sup> Mechanized Battalion which is the sister unit to the 3<sup>rd</sup> Corps Arty Battalion as the *Target*. This unit was in the *Target* list and had to be found by searching the list. It was not on the Mission Planning Map as the 2<sup>nd</sup> is hidden under the 3<sup>rd</sup>.

*Lead Pursuit should take note that alpha-numerically listing the units in the Target's list would be a nice addition for any further patches to Allied Force.*

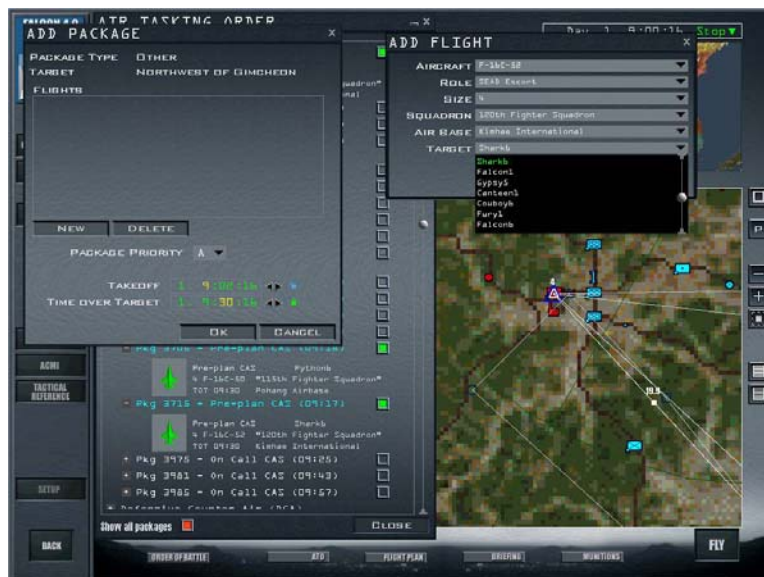
The next slide shows the complement of rotary winged airframes that are tasked for this portion of the mission.





Now that the rotary wing airframe packages have been built, the mission planner needs to address the fixed wing portion of the mission. The *Time Over Target* should be around 0930 hours as the *TOT* of the attack helicopters is 0945 hours. As it is the 9:00 hour and our forces are within the Pusan Perimeter there is sufficient time to build the fixed wing packages and ensure that they may arrive at the target area as required. Timing is essential and must be monitored closely. Missions have to be built ahead of time as assets are limited and the mission planner must consider this when building large packages.

The following slide shows the *SEAD Escort* package being *slaved* to *Shark6* one of the Pre-Planned CAS F16 flights. As the 3<sup>rd</sup> Corps Arty and the 2<sup>nd</sup> Mechanized Battalion are co-located, a single SEAD Escort will suffice to provide ample protection for all flights that will arrive in the *Target* area at 0930 hours. It is unfortunate that a *SEAD* cannot be tasked as an *On-Call SEAD*.





The next slide shows the airframes utilized in the *Pre-Planned CAS*, *SEAD Escort*, and *FAC* packages. The follow-on *Strike* has also been created however the follow-on strike may be deleted from the ATO if the CAS missions are successful and Pangajae bridge does not have to be destroyed. The Strike is not scheduled for *Time over Target* until 10:15 hours.



Now that all packages have been created and placed into the ATO the mission planner may join any flyable package that he desires and enjoy the mission that he has created. This is an important function for the mission planner as it will place him in the 'mix of things' and allow him to 'tweak' any future missions based upon the *flavor* of the campaign.

## AIR MOBILE OPERATIONS

### *Air Mobilization and how it helps Ground Force Operations*

*Lead Pursuit* deserves kudos' for their inclusion of *Air Mobile Operations* within the Allied Force Battlefield operations. Air Mobilization of ground troops aids in the movement of different combat units to the *FLOT* and movement of strategic units from one area to another. Many more things may be accomplished with Air Mobile Operations and I hope that *Lead Pursuit* will take advantage of an opportunity to enhance the ground war. The movement of ground forces using either helicopters or transport aircraft will allow the player to spearhead the front at the players choosing. Be forewarned though that when the player makes a mistake it will cost him in both the ground unit and probably the aircraft as well. One thing of concern is that the *C5s*, *C141s*, and *C17s* do not participate in Air Mobile Operations. The only fixed-wing airframes that can be used are the *C130H Hercules*. The rotary-wing airframes are limited to *CH47 Chinook* and the *UH60L Black Hawks*, which are quite adequate for the movement of light units. The *CH47s* are fuel hogs though and have a very limited range and I have not found a way to get the *CH47s* air re-fueled using tanker operations. Using the proper airframes for

movement of ground units is of paramount importance and players should not expect to move a *Patriot Battery* with *Black Hawks*. *Lead Pursuit* needs to make the heavier transport aircraft available for air mobilization operations. How *LP* would handle how the heavy's pick up the forces at the airfield could create a challenge in the software-coding department, and this is probably the reason that the player can move a *Patriot Battery* with *Hercules* airframes not using any airfields. Air Mobilization of units is quite simple and there are but a few rules that the mission planner has to follow.

Ground units *do not* have to be at an airfield to be picked up by C130Hs. I know that this may sound strange but the C130s are somehow able to 'hover' and pick up all sorts of things. I can only surmise that this has to do with the aforementioned pick-up at airfields and how the rotary winged aircraft Air Mobilization software is used as the model for the C130Hs. Ground units *do not* have to be dropped at an airfield, although they can be if the mission planner so chooses. Use of the proper type of airframe for the job will greatly assist in the positive outcome of the mobilization. The following *is not* an all-inclusive list of possible combinations for air mobilizations operations but rather what I have been able to do within the campaign that was being utilized.

#### C130 Hercules:

- Patriot Battery - Short distance. Longer distances will cause the loss of both the aircraft and unit.
- ADA Battery - Medium to long distances. This helps getting ADA set at strategic areas in a short amount of time.
- Engineers (with the M88A2's) - Short to medium distances. This makes airfield repair times significantly lower.
- Engineer Supply and Fuel - Medium to long distances.
- Multiple Rocket Launch Systems - Both heavy and light, distance will vary depending on unit.
- Light Armor such as that used by the US Marine Corps - Medium to long distances.
- Light Infantry - Long distances.
- Air Assault Units - Long distances.
- Special Operations Battalions - Long distances.
- Headquarters Elements - Heavy and light, short to long distances depending on the element being transported.

#### CH47 Chinooks:

- Light Armor such as that used by the US Marine Corps - Very short distances.
- ADA Battery - Short distances.
- Light Infantry - Short to medium distances.
- Air Assault Units - Limited by the range of the airframe.
- Special Operations Battalions - Limited by the range of the airframe.
- Light Headquarters Elements - Limited by the range of the airframe.

#### UH60 Black Hawk:

- Light Infantry - Short to long distances. Limited by the airframe.
- Air Assault Units - Short to long distances. Limited by the airframe.
- Special Operations Battalions - Short to long distances. Limited by the airframe.
- Light Headquarters Elements - Limited by the range of the airframe.

### ***Planning the Air Mobile Movement***

Mission building flows along the same lines as other given examples given except that there are subtle differences. The first is that the mission planner has to mouse click directly on top of the unit that is going to be moved instead of clicking on the target that the mission planner wants to capture. The player will then select the *Add Package* option to allow the *Add Package* window to open.



The player needs to take note that the unit selected to move is highlighted by a white box. This means that the unit the mission planner is attempting to Air Mobilize may be moving. Should this be the case, the mission planner needs to move the units' destination waypoint to where the unit is currently. This will aid in the success of air mobilization. The unit does not have to remain in the exact same place and as such some movement may happen from time to time. The mission planner should also note that the *2<sup>nd</sup> Air Assault Battalion* consists of infantry ground troops and they are equipped with mortars as well as other specialized weapons. Depending on the location of the *Drop Point* and the equipment load out, these factors will dictate what airframes should be used. UH60Ls will do nicely for this operation.



The mission planner needs to note that the takeoff time is locked and set for a *Takeoff* of 03:00:53 hours. Air Mobilizations can happen immediately if necessary but the mission planner will have a better chance of a successful package build if the *Takeoff* time is moved ahead about 15 minutes to 2 hours. Once the *New* radio button is applied, the *Add Flight* window will open and the mission planner selects UH60Ls as the airframe to be used and the *Role* is set as *Air Mobile*. *Do not use Air Lift as this is for the delivery of supplies only*. The *Size* is 4 aircraft for this mission based on the amount of objects (equipment and stick figures) that have to be moved. As unit attrition takes place and units become smaller, fewer aircraft will be required to complete the Air Mobile operation.



The mission planner chooses the UH60Ls from the nearest airfield to the target unit location. The *Air Base* is selected as soon as the *Squadron* that provides the airframes is chosen. The *Target* box is immaterial, bogus, and of no use to the mission planner and should be ignored. As soon as the mission planner chooses the unit to *Air Mobilize*, the target is selected. When the selections are made in the *Add Flight* window and



the *OK* radio button is applied, the mission package will show up in the *Add Package* window. The next thing that the mission planner needs to do is to move the necessary waypoints before applying the *OK* radio button in the *Add Package* window.



Waypoint management is critical. As soon as the package is generated in the *Add Package* window, there is a set of waypoints that are displayed on the *Mission Planning Map*. Three of these waypoints must be moved to specific locations for the *Air Mobilization* to be successful. There are six initial waypoints. The mission planner can add more waypoints however he *should not add any additional waypoints unless necessary for mission requirements*. If additional waypoints are to be added, the three initial waypoints must be moved prior to adding the additional waypoints. The six waypoints are: 1-Takeoff, 2-Pick Up Point (this waypoint should automatically be placed on top of the unit by the AI that the mission planner is planning to move); 3-Push Point; 4-Drop Point; 5-Split Point; and 6-Landing Point. The waypoints that the mission planner needs to move are waypoints 3, 4, and 5. Waypoint 4 is sitting on top of waypoint 3 and the waypoint track displayed on the Mission Planning Map is a triangle. By mouse dragging waypoint 4, the mission planner can move the waypoint to the *Drop Point*, which is designated as the location that the mission planner wishes to move the unit to. Waypoint 3 and 5 need to be moved to correspond with the *Drop Point*, waypoint 4. Waypoint 3 should be approximately .5 to 2 miles from the *Drop Point* waypoint. The *Split* waypoint should be set at the same distance after the *Drop Point* but more latitude is given here depending upon to location of the drop. This will be discussed further in the C130H section.

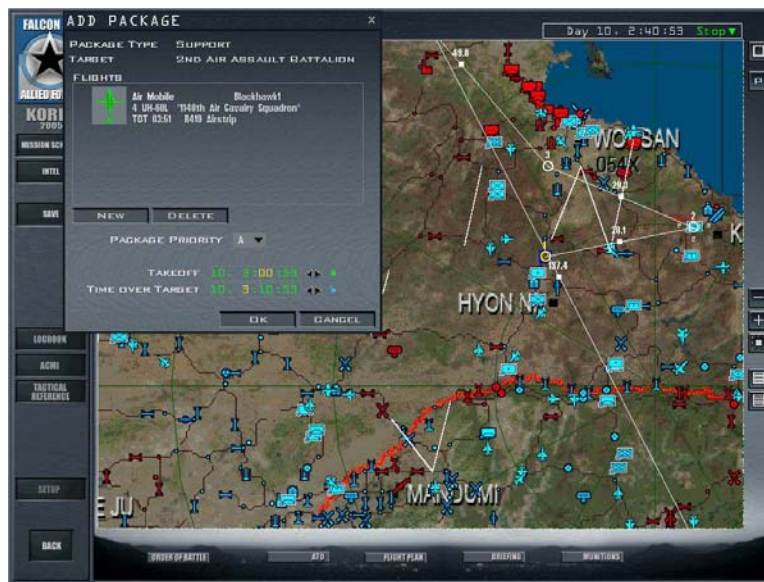




The above slide shows the waypoints 3, 4, and 5 near the location of the drop area. The mission planner must now zoom into the drop area to ensure that the *Drop Point* waypoint is exactly on the target otherwise the unit may not move forward and capture the assigned target. During several movements of units, it became apparent that a few units would not move after they were air mobilized, while other units would. The units that would not move once they were *Air Mobilized* were an *Air Assault Battalion* and a *Light Armor Battalion*. This is a possible bug and it requires further investigation. It is not a large thing as the units could always be Air Mobilized again. It should be noted that once the unit is dropped by the aircraft, it might be up to 15 minutes before the unit can be moved. Other ground units will simply not move and must be air mobilized again for them to move forward. A note about moving *Engineer Repair Units* and destroyed targets – the targets must be captured first or the Engineer unit will not start the repair of the target. The Engineer unit will accomplish the primary function of *capturing* the target, then await additional instructions to *repair* the target captured. The mission planner must monitor the status of the Engineer Repair Unit to insure that the unit is assigned the proper task. This can be done by checking the *Status* of the unit as the unit goal is listed in the *Orders* window.



The slide above shows that the waypoints 3 and 5 have been moved to within the 2-mile radius of the target area. Waypoint 4 is placed directly on the target. Waypoint modification is very touchy in creating any package, A2A, A2G, or Air Mobilization. The mission planner should not create any additional waypoints unless absolutely necessary as the waypoints may become corrupted and the package must be *cancelled* and rebuilt. The mission planner should also note that according to the *Flight Schedule*, the *Time at Landing Zone* is set at 2 minutes and the *air speed* is set at *zero knots*. This is normal for Air Mobilization flights and should not concern the mission planner. The following slide shows a corrupted waypoint track and the package *must* be cancelled and rebuilt or there will be anomalies within the *Air Tasking Order*. Waypoint 1 (which has turned the color yellow) has repositioned itself to a bogus location.



There is only one other caveat. If the mission planner creates a flight and the mission generator gives the message of '*Orbit*', it means that the air unit that the mission planner is trying to draw airframes from is in the process of relocating closer to the *FLOT* and thus is unavailable to provide airframes for the requested mission.

### *Air Mobile Operations using C130's*

In the current campaign at MultiVipers (two campaigns have been won so far) there are two Engineering Battalions located in the *Korea Strait* southeast of *Sachon Airbase*. How these particular units arrived in the middle of the *Korea Strait* is somewhat of a mystery. We are however going to take advantage of the situation and attempt to *Air Mobilize* both of these battalions. I was successful in a campaign of moving a *MRLS Battalion* from the *Yellow Sea* to *Kansan Airbase* so this should be OK.



As *Sachon Air Base* is only 50% operational, this provides an ideal opportunity to move one of these Engineer Battalions from the middle of nowhere to some place that it can be utilized in its proper role. The other Engineer Battalion will be moved to *Stanching Bridge* just north of *Sachon Airbase*. The bridge is also 50% operational. The bridge is owned by the DPRK so the bridge will have to be captured first. *Sachon Airbase* has been in the *Blue Forces* possession since the beginning of the campaign thus it does not need to be captured.

The following slide shows the *Air Mobile* package being generated to move the 5011<sup>th</sup> Engineer Battalion to *Sanchong Bridge*. The 5011<sup>th</sup> Engineer Battalions mission will be two fold, first to capture *Sanchong Bridge* and then to repair the bridge. Note that the *Takeoff Time* in the *Add Package* window is set to 05:00 hours and that the time is *locked*. This was done to ensure that there would be enough available aircraft to fulfill the *Air Mobile* operation.





The next slide shows the *Add Package* window with the *C130H Package* and the initial movement of waypoints 3 and 4 (*Push Point* and *Drop Point*) by the mission planner.

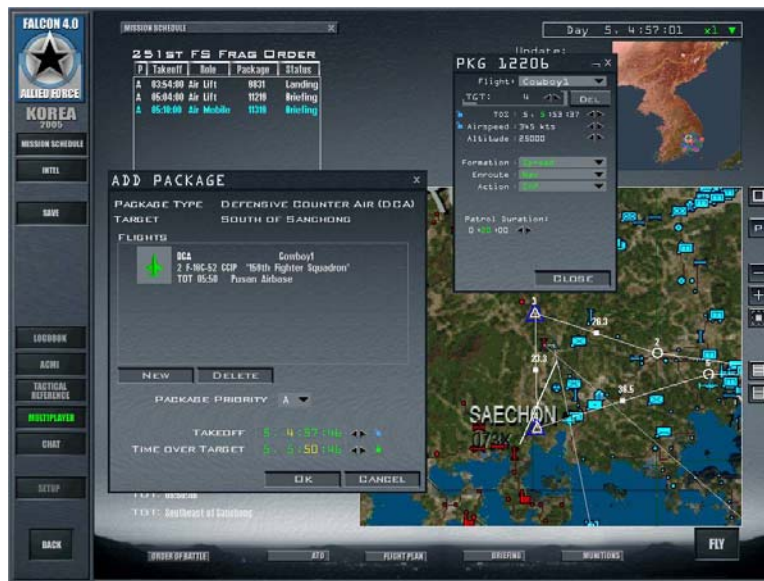


The next slide shows the *Air Mobile* package in the *ATO*. It is assigned under *Other* flights with the *Package# 11319*. Waypoint 4 is shown in the *Flight Plan* window with a *TOS* of 06:01 hours and the *Action* is designated as *Air Drop*. *Airspeed is zero and this is as expected*. The mission planner has moved the *Push Point* and *Drop Point* to their designated places. Waypoint 5 was intentionally left some distance from the FEBA so that the C130Hs would not immediately go into a high angle climb and expose themselves to unnecessary risk by enemy aircraft.



The *TOS* of the *Air Mobile* is at 06:01 hours therefore a *DCA* flight is generated to provide air coverage for the *Air Mobilization* flight. The following slide is of the *DCA* that was placed over the *Air Mobile Drop*

Point area with a *Time Over Target* of 10 minutes prior to the arrival of the C130Hs. Note that the time of *Patrol Duration* is set at 20 minutes instead of 30 minutes.



This next slide shows the *Air Mobile* package just prior to waypoint 2. Take note that a nice pair of *SU27s* decided to show up to give the DCA and BARCAP something to do. The DCA is just to the west of waypoint 2 and the BARCAP for *Sachon Airbase* is engaging the enemy aircraft.



This slide shows the *Air Mobile* at the *Push Point*. Note that the DCA has departed the *Patrol* area, as did the BARCAP and SU27s. *They flew around a lot, snickered, and called each other some rather nasty names. It is after all, war.*

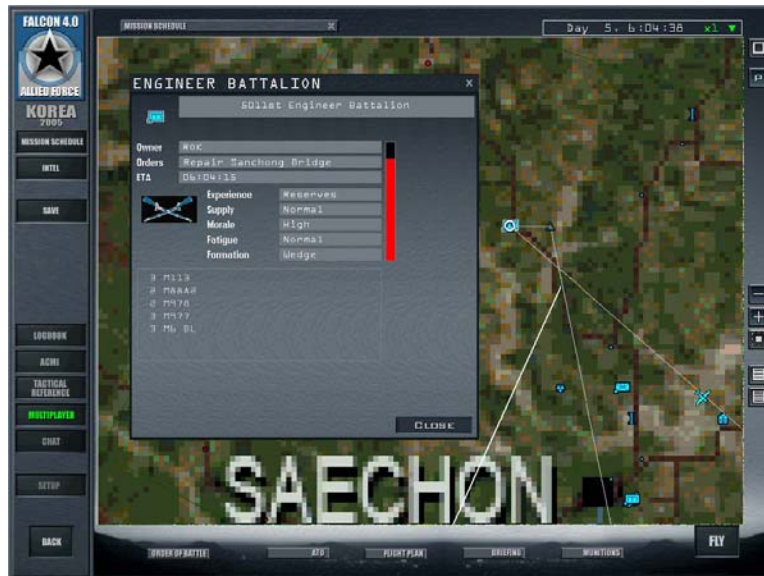




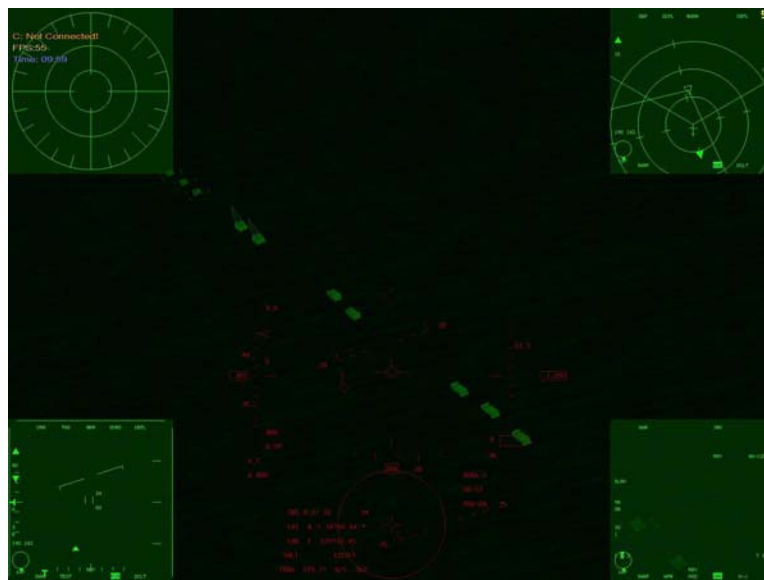
The next slide shows the *Air Mobile* flight over the *Drop Point*. Note that the 501<sup>st</sup> Engineer Battalion that was picked up at waypoint 2 is still in the *Korea Strait*. The unit being *Air Mobilized* is not moved to its new location until the C130s depart the *Drop Point* waypoint.



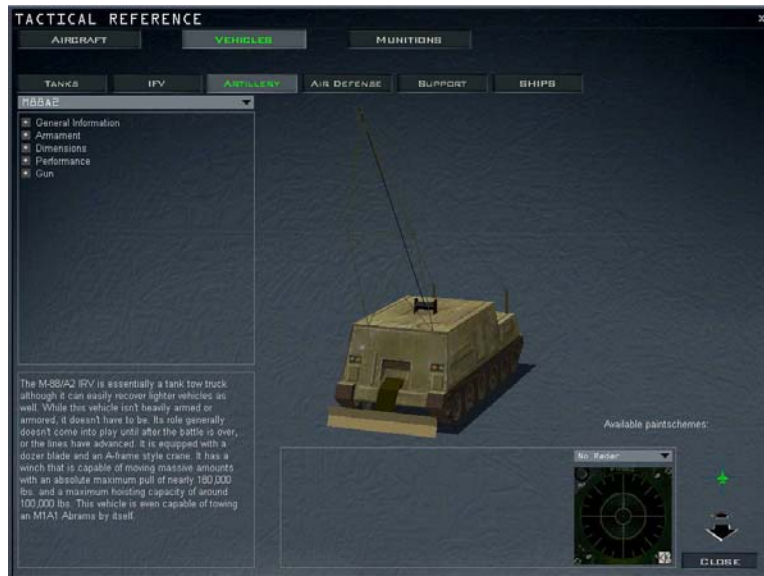
The final slide in this series shows that the C130s have departed the area for waypoint 5, which is the *Split* waypoint. The 501<sup>st</sup> Engineer Battalion has moved from the *Korea Strait* to *Sanchong Bridge* and has captured the bridge. The *Status* window shows that the *Orders* are *Repair Sanchong Bridge*. Depending upon the damage to the bridge, repair times can vary from 4 to 40 hours per span.



The following slides show the move of the 5018<sup>th</sup> Engineer Battalion from the Korea Strait to Sachon Airbase. The 5018<sup>th</sup> Engineer Battalion is seen in the ocean at the Pick Up waypoint.



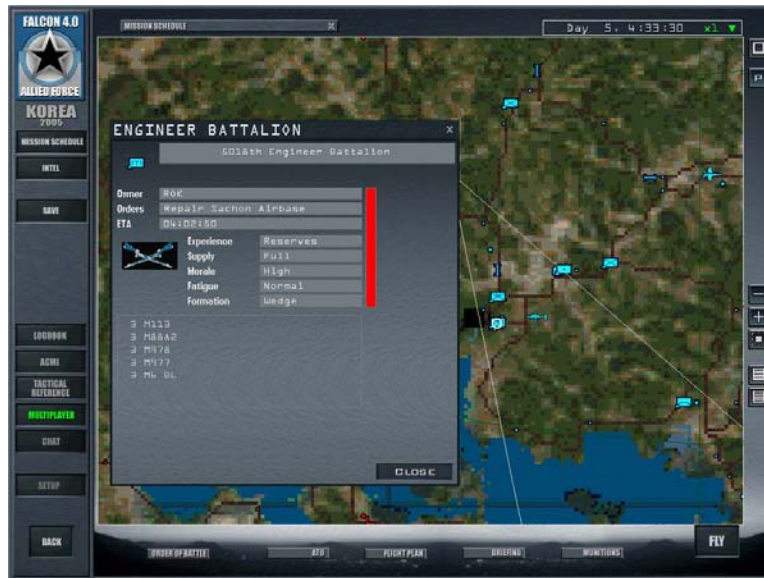
Notice the two M88A2s in the upper left corner. These are the engineer vehicles that will repair airbases and single spanned bridges. A good picture of the M88A2 is available in the TACREF on the Mission Planning Screen.



The next slide shows the *Air Mobilization* mission in the ATO. Notice that the *5018<sup>th</sup> Engineering Battalion* has already been picked up from the *Korea Strait* and dropped at *Sachon Airbase* and the C130Hs are on their outbound leg of the flight path. The highlighted flight path is of the 2 ship *Sweep* that the Mission Planner added to insure that the C130Hs arrived safely.



The next slide shows that the *5018<sup>th</sup> Engineering Battalion* has assumed its primary role of *Repair Sachon Airbase* as indicated in the *Orders* of the unit *Status* window.

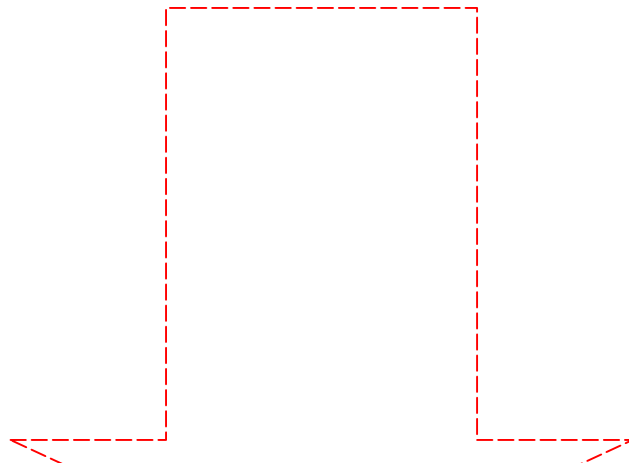


*I hope that this guide has been beneficial for all who have taken the time to read it in its entirety. I know that this was suppose to be a 'short' instructional sheet on the 'how and why' but the further that I went into the nuances that this simulation has, the more and more nuances that I discovered and hopefully have passed on to you, the reader. I again want to thank Lead Pursuit, MultiVipers and all of the people that I have met online that have contributed in one way or another to this project. You are too numerous to name but I thank every one of you, the Falcon Virtual Pilots. All of us owe thanks to all the people that have kept Falcon 4 alive since 1998 in whatever version was available at any given time. Without the hard work that these people have given, we would not be here today having discussions of Falcon 4 in any form what-so-ever.*

Questions and answers about this guide and the contents thereof can be left at: <http://www.multiviper.com/viewtopic.php?t=138>

You do not have to be a member to post there but I encourage you to register. I will attempt to answer any questions that I can or refer you to someone who can answer them.

**MVS – Hawk**





*A sneak preview of Part III:*

## ***THE GROUND WAR (CON'T)***

### ***Advancing Friendly Ground Forces***

The advancing of ground forces is necessary to win the campaign. Only through the recapture of lost PAKs and by capturing some enemy PAKs will the player win the campaign, dependent upon the campaign selected. Capturing enemy territory will only be accomplished with ground forces. Allowing the AI to control the ground forces will eventually result in a campaign win *if* air superiority is maintained and there are still friendly ground forces able to advance. The AI does an OK job with ground operations just as it does an OK job with the ATO. This means that the mission planner needs to run the ground war as well or else a campaign that can be won in 7 days will take 20 days or longer to win. Often times in the past, this has created a problem where the campaign clock would just stop, leaving the player to wonder – *Did I win or loose?* The only way to be sure was to check your logbook to see if you received a campaign medal (Expeditionary Medal). Even then, it was hit or miss. Cooler69 from *Lead Pursuit* was kind enough to publish some information on one of the forums that gave the campaign win scenarios for Allied Force. As this information is published on a public forum and is for the use of the mission planners and simulation players, I will provide the link to the list of information that did not get into the *LP* manual in time for publication. This will aid those mission planners that are not aware of the requirements for a campaign win.

Campaign win requirements:  
<http://forums.frugalsworld.com/vbb/showpost.php?p=1045214&postcount=8>

This part of the guide to Campaign Management and Mission Planning will deal solely with the advancement of ground forces into enemy territory. Although there will be some sections that will cover *Combat Air Operations*, the fundamental purpose of this section will be on how to move forces with little air support to achieve short and long term goals and thus win the campaign. Air support will be limited to Air Mobile operations for the forward movement of ground force assets and Combat Air Support provided



by rotary-winged airframes. The gist of Part III will be from the view of the ground force commander and not the *CINC*. Therefore, the mission planner will .....