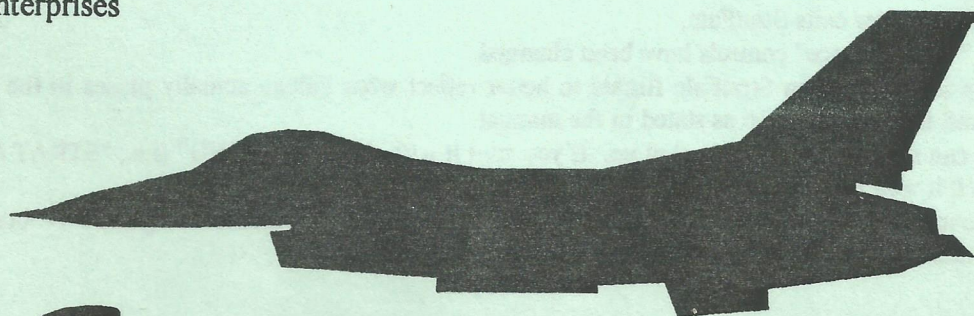




Strategic **FALCON™**

Version 1.1 Update

New! in Version 1.1:

- Sim Mode! Strategic Falcon is now awash in strategy!
- Loadouts! No more overloaded planes!
- Speed limits will now be enforced!
- Updated for Falcon 3.05.
- Added "Perfect" button to the pilot's dialog to allow you to instantly set all attributes to 100.
- The mouse interrupt has been tweaked to speed up mouse movement—use the "/NOSPEEDUP" switch on startup if you prefer the old method.
- K Boxes (Kill Boxes) takes the place of Nums on the main screen. This is a little more helpful than site numbers. You can still see the numbers, however, if you go to OTHER/MAP.
- <F1> brings up a screen that shows the Function key assignments.
- You can now instantly switch your first Falcon flight with any other flight. Just hit <F3>.
- One key brings you to Falcon! <F4> starts Falcon, and when you exit, you'll be back in StratFalc again (even works while in the KCC menu program!).
- In the "Where?" mode, the right mouse button will now cause an exit to normal mode, and the "Esc" key will also now do so properly.
- StratFalc now compensates for Falcon's annoying habit of deducting your fuel after you exit Falcon from the cockpit.
- RESTRCAM.BAT has been updated to allow for greater backup integrity.

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- Fixed occasional heap allocation problem with opening files.
- Victory/Defeat nodes in Kuwait can now be properly selected.
- Fixed problem where StratFalc was setting the DOS VERIFY flag and not resetting it to its original state (thereby causing disk access slowdown).
- Fixed problem where allied flights were being limited to an altitude of about 30,000 feet.
- Available aircraft in Bosnia have been updated to reflect what you can really put there—just about everything!
- <ALT-X> now exits StratFalc.
- The “Timing Trace” controls have been changed.
- Put a new limiter on StratFalc flights to better reflect what Falcon actually places in the theater—total aircraft is now 14, not 16 as stated in the manual.
- You can now tell StratFalc to shut up. If you start it with the “/NOSOUND” (i.e., “STRAT /NOSOUND”) switch it won’t make a peep no matter how badly you confuse it.
- If the map is zoomed in over a certain amount, and you change waypoints using the “+/-” button, StratFalc will automatically slew the map so the new waypoint is centered.

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Technical Support

If Strategic Falcon is giving you trouble, I want to know about it! (Please read the manual first, though!) Don't call KCC or whomever your distributor might be—they don't know nuthin'. You can reach Flying Muffin Enterprises at (203) 443-3380, that's:

Flying Muffin Enterprises
24-Hour Technical Support Hotline
(203) 443-3380

I keep very strange hours (all 24 of them), so if I'm not around leave a message on the machine and I'll get back to you.

Important Notes

There are a couple very important notes that must be mentioned before we get into this doc. They concern successful completion of Falcon missions and campaigns.

First, when you fly a mission in Falcon, at least one F-16 must survive or the mission will be a failure. This means if your wingmen pilot aircraft other than F-16s, and you're in the *ONLY* F-16, you'd better survive the mission. If you don't, it's either abort or fail!

Second, when you're closing in on victory in a campaign, don't move your home base right up to the front (and if it is there, move it back a little—you should have at least one friendly site as a buffer). Falcon has a tendency to get confused and hang up if it has to move your home base *and* declare victory at the start of the same 0600 mission. (You'll recognize the problem: first you'll get the announcement that your base is being moved, and then Falcon will hang.) If it happens, run RESTRCAM and create a buffer site manually before refllying the 2300 hr mission.

Falcon 3.05 & Falcon Gold CD

If you're using the Falcon GOLD CD and using the CD (not the full Hard Drive installation), you'll have to copy the following files from the "F3CD" directory on the CD to the "FALCONCD" directory on your hard drive:

ILS.BOS	ILS.HOK	ILS.IRQ	ILS.ISR	ILS.KOR	ILS.NEL
ILS.PAK	ILS.PAN	BOSNIA.STR	INDIA.STR	ISRAEL.STR	SQDNAMES.STR
JAPAN.STR	KOREA.STR	KUWAIT.STR	NELLIS.STR	PANAMA.STR	

(In other words, ILS.* and *.STR)

Also, the new STRTSPRT.COM TSR (version 1.3) works differently with Falcon version 3.05. Instead of clearing read-only bits, it clears the hidden bits of files. Because of this, NEVER override version checking in StratFalc if you're using Falcon version 3.05!

Simulation Mode

The biggest new feature in Strategic Falcon version 1.1 is almost invisible, yet has a tremendous impact upon how you wage war. It's called "Simulation Mode" ("Sim Mode").

Introduction

The purpose of Strategic Falcon has been, since the outset, to add a dimension of strategy to Falcon 3.0. That's where its name came from. Up to this point, however, the strategic elements of game play have been vague and elusive. For example, it's been hard to see any direct correlation between persistent strikes on a specific site and future capture of that site (although this correlation does indeed exist!). These strategic elements have remained elusive for one major reason: there have been no features in StratFalc that would override any of Falcon's own strategic theater decisions. It's one thing to allow you to place units that would weaken an enemy site and, after the attack, let Falcon 3.0 decide whether that site would become yours; it's a whole different animal to let StratFalc make the decision and override Falcon.

With its new Simulation Mode, StratFalc has taken the plunge, and done so in a rather large way. While leaving Falcon's "mission to mission" functions totally alone, and still allowing it to carry out its own strategic theater operations (that is, deciding at 0600 every day what is yours and what is the enemy's), you now have a method to strategically capture a site.

That's not all. Allied aircraft are now grouped into their own squadrons and assigned to specific bases, and any ground units you use for site attacks must come from one of the three brigades that you are assigned at the outset of a campaign.

Bear in mind that you do not have to use Sim Mode at all. You can go back to the previous mode of operation simply by checking the "Sim Mode—Off" box in the Other/Config submode. Don't forget to press "Save Configuration" if you want it to stay off for future StratFalc sessions.

Everything detailed in this section only occurs if you have Sim Mode enabled.

When you start a new campaign, StratFalc will calculate the quantity of all aircraft and ground units that you have at your disposal to prosecute your various attacks. It bases this total on how many units are at each of your sites, but also considers the appropriate Order of Battle given in the Falcon documentation, as well as the difficulty level currently set in Falcon 3.0 itself.

Aircraft

Aircraft: Overview

Based on its calculations, Strategic Falcon generates specific quantities of each aircraft type. This quantity is all you get for the entire campaign; unlike Falcon 3.0, there are no *direct* replacements at any time! Use them wisely!

StratFalc assigns all aircraft types to their own squadron and each squadron to its own base. In other words, if the order of battle includes a squadron of 12 F-15s, 8 B-52s, 10 A-10s, and 8 F-111s (the list would continue—you receive some of each type of available aircraft), and the allies currently hold three active airbases—call them, in order of distance from the enemy, Airbase A, Airbase B, and Airbase C—then StratFalc might place the F-15s and A-10s at A, the F-111s at B, and the B-52s at C. (Thanks to Chuck Corway, Dom Killers, and the others in FSFORUM who helped with the appropriate squadron names.)

When you add a flight of friendly aircraft to a mission, StratFalc will automatically place its starting waypoint (waypoint 0) at the appropriate base, and will place waypoint 1 in the current center of the map. (You will be free

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to move waypoint 0, but wouldn't do so if you were playing realistically.)

You can transfer the squadrons between airbases after this initial setup, but doing so will take anywhere from two to twenty-four hours (depending on distance between the two bases involved, how busy they are, and the state of your campaign), and the aircraft in that squadron will be unavailable during the move.

After you fly the mission and return to Strategic Falcon at the beginning of the next one, StratFalc calculates the losses of any aircraft that were placed "at risk" in the previous mission. **THE LOSSES DEPEND DIRECTLY UPON YOUR SUCCESS IN ACCOMPLISHING YOUR MISSION**, as well as the current campaign difficulty setting in Falcon3. In other words, if you succeed in your primary goal, aircraft losses will be minimal or nil. If you fail, you'll lose some or all of the aircraft that you sent out on missions. If you lose aircraft, StratFalc will tell you so; if you don't see any such announcement, you can safely assume all your StratFalc aircraft survived.

There are also many degrees of success. While accomplishing the primary goal is the main criterion, StratFalc also tracks how many of your F-16s were destroyed during the mission, how many enemy aircraft were shot down and their types, and how many ground units and installations were destroyed and their type. Generally speaking, though, if you succeed in your primary mission and lose none of your own (F-16 slot) planes, you'll lose none of the StratFalc planes, either.

(The losses are calculated in this manner because there is no way available to directly collect the Falcon3 "debrief" info from each mission.)

Aircraft: Controls Available

All controls for the Sim Mode are grouped in the STRAT mode under the SIM submode (it used to be "Attk"). You'll see there are now four radio buttons at the bottom of the control panel: "Attk," "Grnd," "Air," and "Bases." (If Sim Mode is turned off, the latter 3 radio buttons will be grayed out.)

For air operations, the two controls that concern us are the "Air" and "Bases" buttons.

If you select "Air," the squadron controls fill the top part of the panel. You'll notice that the map returns to zoom factor one and 0,0 origin, in order to give you a view of the entire theater. Any airbases that you occupy will show up in yellow.

Using the "±" button, you can cycle through all your squadrons and discover their names, aircraft type, quantity, and current base. On the map, an icon will appear at the appropriate place.

You can also cycle through the squadrons at any base by right-clicking the mouse on that base. You can jump to a base by left-clicking directly on it. If the base has no squadrons, you'll hear a beep.

To transfer a squadron, simply grab its icon with the left mouse button and drag the mouse to the base desired. (You'll only be able to transfer squadrons to those sites shown in yellow, with the exception of the carrier, which you won't be able to transfer to at all.) A line will extend from the squadron icon to the new base.

You'll be informed how long the transfer will take and asked to confirm the move. If you do confirm it, a number will appear below the base name. This number indicates how many hours remain until the squadron transfer is completed. A blue "D" will appear at the destination base for any squadrons being transferred. Once you give the order to transfer a squadron, the squadron will be unavailable until it reaches its new base. You won't be able to change its destination once the order has been confirmed.

There's also an aircraft carrier involved; you'll see it as a yellow square off the shore in those theaters that have water (that's all but Pakistan). Your F-14, F/A-18, and F-4 squadrons will be based on the carrier. You'll be able

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to transfer squadrons off the carrier, but never *to* it. (And no, you *can't* move the carrier!)

At the bottom of the "Air" screen is a "Summary" button. This gives you an overall view of your air force. For each squadron it will tell you the aircraft type, quantity, how many are already committed to missions, the name of the base, and the squadron name.

If you select "Bases" from the Strat/Sim submode, you get information about each airbase. This information includes which squadrons are based there: the type of plane and how many of that type are available.

Also included is an "Evacuate!" button. If you're afraid the enemy may be about to take over one of your bases, it's a good idea to evacuate it. More information is given in the "Details" section below.

Aircraft: Details

-Mixed Aircraft Types-

Use of squadrons is largely automatic. If you add a flight of aircraft, its starting waypoint will automatically be placed on the proper base.

A wrinkle appears when you mix aircraft types in the same flight. What StratFalc does in this case is assign the flight to the airbase of the lead plane. For instance, if you have a flight of two A-10s led by an F-15, the flight will originate at the F-15 squadron's base, not the A-10s'. It is assumed that the A-10s have flown to the leader's base before the mission begins. Note, however, that the A-10s are not "free"—they still come from the A-10 squadron, wherever it is!

Another twist is F-16 flight slots. If you assign another aircraft type to be the leader of an F-16 flight (meaning your wingmen are flying other types of aircraft), StratFalc will ask you if you want to move that flight to the proper base. What this means is your pilots are temporarily flying out of that base. Again, you can override this setup and move the starting waypoint wherever you want it.

What happens when you change a lead aircraft type AFTER a flight has already been laid out? Well, StratFalc asks you what you want to do. You can either leave the flight like it is or have StratFalc move its first waypoint to the proper base.

-Evacuation-

If the enemy is closing in on one of your bases and you want to get all your planes out, you should hit the "Evacuate!" button. If you do this, all squadrons at that base become unavailable and they scatter to any other available bases. You have no say over where they're going.

You may wonder why this would be necessary—why not just transfer the squadrons manually? Because there's no guarantee that a manual transfer order will be carried out within the next six hours. A transfer can sometimes take a full day to complete (and here StratFalc is being easy on you!). An evacuation is basically a scramble: everyone fuels up and flies, with whatever JP-5 they can get in their plane and whatever stores they can get on its wings.

If a base is captured while squadrons are still there, you **WILL** lose those squadrons! An exception: any squadrons with units currently committed will not evacuate.

-Aircraft Placed by Falcon-

When you begin a new mission, StratFalc examines the flights that are generated by Falcon. If it determines that any of these flights is an escort or support flight for your F-16s, it will ask if you want to move that flight to its

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proper base.

If you answer "No," the starting waypoints of these (which normally start very close to your airbase) will remain where they are.

If StratFalc determines that the flight in question is directly related to your mission (B-52s to be escorted, for instance), it will leave them alone (it is assumed that they've flown to their starting waypoints and are just reaching your base when the mission starts). StratFalc does this to avoid interfering with Falcon's mission-generating logic—especially when an escort mission is involved. However, these aircraft still come out of your squadrons! For instance, if Falcon gives you four B-52s, those Buffs come from your B-52 squadron, and if you lose the mission, you'll (probably) also lose those B-52s.

There's a flip side to this. It is also the only way to get aircraft "replacements" in Strategic Falcon. Say your F-15 squadron is wiped out in the course of the war. If, in a future mission, Falcon allots a flight of 2 F-15s to you, these F-15s become your replacements, as long as you don't change their aircraft type to something else before flying the mission (in other words, keep the F-15s as F-15s, don't make them A-10s or something). If you succeed in this mission and all the F-15s don't get destroyed, then the surviving F-15s become your newly revived F-15 squadron.

Note that this only applies to Falcon-supplied aircraft when your own squadron of that type is either destroyed or doesn't have enough of that aircraft type to satisfy Falcon. In the above example, if you had 2 F-15s in your F-15 squadron, the Falcon aircraft are taken from there. If you had only one F-15, then you have a chance to add a second one.

-The Enemy Squadrons-

With all this tracking of aircraft, you might wonder: what about the enemy squadrons? Is anybody keeping track of those? I could lie to you and say yes (you might even believe me!). But no, the enemy aircraft aren't tracked—and there's a reason why StratFalc doesn't bother: keeping tabs on who's been destroyed implies that StratFalc would do something about it.

In other words, if StratFalc decided at the beginning of a campaign that the enemy had 16 MiG-29s and kept count of them, then when you had destroyed all those MiG-29s you'd expect to see no more (logically enough). For StratFalc to do that, however, it would have to step in and directly alter any future Falcon-generated mission that used MiG-29s. Other than moving the starting waypoints of some flights as discussed above, Strategic Falcon will never directly alter any Falcon mission (it leaves that up to you!). To do so is just asking for trouble, as well as angry calls to technical support.

If this bothers you, just keep tabs on the enemy yourself and, when appropriate, change the aircraft types accordingly. Falcon does seem to track them itself to some degree; the enemy aircraft seem to get "easier" as a campaign goes on.

Ground Units

Ground Units: Overview

In addition to calculating the available air units, StratFalc will track your ground units. At the beginning of the campaign, SF tallies up all the ground units at all sites you occupy. Again depending upon the Falcon3 campaign difficulty setting, it adds an additional quantity of units that become the brigades of the "1st Armored Division." These are all the units that you have available to carry out ground attacks.

The 1st Armored Division begins the campaign at your home air base. For the purposes of Strategic Falcon, the

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battalions of the Division are grouped into three brigades—two armor and one mechanized infantry. The brigades are stand-alone units inside the 1st Armored Division and so move independently.

Although the smallest unit that you can move is the brigade itself, the brigades are each (internally) further broken down into four battalions. An armored brigade will have two armored battalions, one mech infantry battalion, and one artillery battalion. A mechanized infantry battalion is the same, but one of the armored battalions is replaced with a second mech infantry battalion.

The movement of brigades is fully discussed in "Details" below, but to give you an overview of the way they move: missions in Falcon occur at six hour intervals. It just so happens that "turns," for brigade movement purposes, are also based on a six hour interval. To keep a close eye on your brigades, therefore, it's best to come back into StratFalc after every Falcon mission.

If you want to launch a ground strike against an enemy site, the site must be within 15 miles of one of your brigades. Each time you place a ground path—commit to a strike—StratFalc will ask you which brigade you want to use. You can place up to sixty units in up to four ground paths, depending on what else is going on in the current mission. These units are placed "at risk."

If you use the "Attk" screen to place the units, StratFalc will only allow you to attack sites that are within 15 miles of a brigade; if more than one brigade is within that distance, StratFalc will take the units from the closest one.

Just as with "at risk" aircraft, after you fly the current mission and return to Strategic Falcon at the beginning of the next one, StratFalc calculates the losses of your ground units. Again, the losses depend directly upon your success in accomplishing *your* mission, as well as the other factors discussed in the "aircraft" section above. StratFalc will report any losses.

To commit to an all out assault in an attempt to capture a site, you simply make the site the destination of one of your brigades. StratFalc examines the situation and calculates the outcome of the battle. If you are victorious, you will occupy the site.

What about the enemy brigades? They're there, but you'll won't see them until it's too late! The only time you'll discover their presence is when you run into them while you're behind enemy lines—and you'll take heavy losses if you do! The enemy tends to keep his brigades entrenched in his own territory, and he normally only uses them for reinforcement of his strategic sites. They'll rarely cross over into your territory.

However, if you stray too deeply into the red zone, you can very easily find yourself facing his units. They'll be well dug in and they won't even start shooting until your flank passes their forward elements. Entire brigades have been known to be wiped out before they have a chance to extricate! The lesson here: don't go beyond the forward edge of the battle area unless you need to! And if you need to, make the foray as short as possible—your chances of running into the enemy increase with each mission that you remain behind the lines. (As a rule, attack the sites on the front line and capture them—only advance as you push the enemy back. Although it is often *very* tempting to make an end run for one or two sites that you need to meet victory conditions, if you get bogged down back there, you'll be ambushed and very likely will lose your brigade.)

If you do get entangled with an enemy brigade, the *only* way to get away from it is to get your brigade back into friendly territory. Unfortunately, your units will move very slowly once they're engaged.

Ground Units: Controls Available

The controls available to assist your command of the ground forces are found in the "Grnd" screen in the "Strat/Sim" submode. These include radio buttons to select the brigade to which you wish to issue orders, radio buttons to set the brigade's speed, a button to bring up the "Order of Battle" box (this box details the current strength of the brigade), and a box which informs you if the brigade is currently in enemy territory.

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If a brigade has been destroyed, its name next to the radio buttons will be grayed out and will be unselectable. If all of your brigades are wiped out, StratFalc won't let you into the "Grnd" screen at all. (You can always turn off "Sim Mode" in configuration if you want to place a ground attack but have lost all your brigades.)

To move a brigade, either select the radio button of the one you want or click on its icon on the map. Next, "drag" it to its destination. A line will extend from the brigade to the point you indicated.

To reset the destination, click inside the small box at the end of the destination line and move it to the new location. To clear any motion of the brigade, click on the brigade's icon itself.

The circle around the brigade shows its striking distance—it's the fifteen mile radius inside of which you can carry out "Attrition Attacks" (explained below).

To set the brigade's speed, click on the appropriate radio button. Please read the "Details" section below for some important information on how brigades move.

Ground Units: Details

-Capturing Enemy Sites-

One thing has to be made clear: with the addition of Sim Mode, you now have two kinds of attacks at your disposal. First, you have the old type, where you place ground units at an enemy site and they go in and blast it out with the bad guys. This is called an "Attrition Attack" and is used to weaken an enemy site in support of future or current air operations, as well as to put the odds in your favor for future capture of the site.

To carry out an Attrition Attack, just do what you've always done in StratFalc: you either use the "Attk" screen in the Strat/Sim submode or you place units manually using the Tact/Alld Ground submode. This is fully explained in the Strategic Falcon manual. Remember to use one of the site "activation" methods! Again, in "Sim Mode" you won't be able to place an attack any greater than fifteen miles from one of your brigades.

The new kind of attack occurs when you set an enemy site as the explicit destination of one of your brigades. This is the only way to capture a site directly and strategically with StratFalc (you can occupy a site NONstrategically by simply using the Strat/Occupy submode). This new method of attack is called, logically enough, a "Capture Attack."

To accomplish a Capture Attack, you use only the Strat/Sim submode's "Grnd" screen. Instead of moving one of your brigades *near* an enemy site, you move it right *on to* a site. A dialog box will confirm that you want to attempt to capture the site. Unlike an Attrition Attack, in a Capture Attack you don't have to activate any sites inside Falcon 3.0: the battle is fought totally inside Strategic Falcon's little brain.

When you commit to this type of attack, StratFalc examines the situation and calculates the outcome of the battle. You will discover this outcome after you fly the current mission and come back to StratFalc. If you are victorious, your brigade may take some casualties but you will occupy the site. If you lose, **YOUR BRIGADE WILL BE WIPED OUT!**

Did that get your attention? Good. You probably would like to know a little more about how StratFalc decides the outcome of the battle, so you can maximize your chances for success.

The first and foremost consideration is (you guessed it!) how well you do in your current Falcon mission. (This all depends on you!) If you accomplish your mission, the brigade will fight *much* more effectively.

The second most important consideration is the quantity and type of units involved. If you've got a brigade with

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40 tanks going up against a bridge that only has 10 BMPs for defense, you can rest assured you're going to mop it up with little trouble. However, if that same brigade goes up against a site garrisoned with 60 tanks and artillery, the outcome is doubtful.

The third consideration is the energy level of your brigade (which will be discussed in the next section). It pays to rest your troops before sending them into battle. Generally, any troops whose energy level is below 10 will suffer degradation of battle effectiveness. However, the adverse effect doesn't really become pronounced until the energy level hits 5 or 6: after that, their ability to fight falls off sharply—sending in troops with energy levels of 1 or 2 is almost certain suicide!

The final factor in deciding these battles is whether the site in question is a victory node for either side. The enemy will fight harder to hold onto one of its victory sites or to keep you from capturing one of yours.

So, taking these considerations into account, you might discern a prudent manner of attack against an important site: whittle it down before committing to the final offensive! Move your brigade to within 15 miles of the site but don't attempt to occupy it just yet. While the brigade rests up for the Capture Attack, send a few Attrition Attacks against the site to weaken it. Only when you have an overwhelming numerical advantage should you finally order your brigade to move in. (Of course, it's up to you—you may not be this type of commander!)

-Energy and Fatigue-

Energy and Fatigue are the same thing looked at from opposite sides. At the beginning of a campaign, your brigades are fully rested and have a perfect Energy level of 15. As they carry out operations in the theater, they burn up this energy.

You can tell any of your brigades' current energy level from the Strat/Sim Grnd screen. If this number gets to zero, the brigade can't move or carry out any form of attack. If you manage to get this number below 0 (which is entirely possible!), you'll wish you hadn't!

Everything costs energy, from moving along the back roads to carrying out attacks against the enemy. But you gain energy as well. Every six hours, you regain 2 energy points—back up to the maximum of 15. If you leave the brigade in an allied city or at an allied base, it gains 3 points. But if a brigade is trapped behind enemy lines, it will only get back only 1 point in those same six hours.

Any "Attrition Attack" costs one point of energy for the entire brigade. The cost of a "Capturing Attack" varies from one to three points, depending on the status of the adversary.

-Brigade Movement-

The movement rate of each brigade depends on several factors. These include the terrain it travels over (roads or non-roads), the speed you set for it, and its energy level.

A fully rested brigade moving along roads, at normal speed, and encountering no resistance will cover 40 miles in six hours. (We have to make allowances for logistics and constant mechanical breakdowns.) The same brigade moving at doubletime speed will move 60 miles, and at maximum speed it will cover 80 miles.

If the brigade is off the roads, cut each of the above distances in half.

In addition, movement tires your units and costs them energy points. Normal travel along roads uses energy at a level of 3 points every six hours.

However, as mentioned above, every six hours your units regain 2 points of energy. So, while moving at normal speed over roads, they lose a net energy of only 1 point. At this rate, they could travel for more than three days

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before they collapse from exhaustion.

Things change when you press them too hard. Energy costs go up a point for each increase in speed rate, and moving off-road costs another point. If you put your units at top speed off-road, they'll burn up 6 units of energy. Since they only recoup 2, they'll lose a net of 4. They'll start dropping like flies soon after one day of this treatment!

The tables below summarize movement, its rates, and associated energy costs.

-Energy Cost-

	Normal	Dbl-Time	Maximum
On-Road	3	4	5
Off-Road	4	5	6

-Energy Recuperation-

Normal	In City/Base	Enemy Terr
2	3	1

-Movement Distances-Miles

Beginning energy level 11 to 15:

	Normal	Dbl-Time	Maximum
On-Road	40	60	80
Off-Road	20	30	40

Beginning energy level 6 to 10:

	Normal	Dbl-Time	Maximum
On-Road	30	50	70
Off-Road	15	25	35

Beginning energy level 1 to 5:

	Normal	Dbl-Time	Maximum
On-Road	20	40	60
Off-Road	10	20	30

Take a look at the tables here. Do you see the trouble? Strategic Falcon doesn't tell you how to command your troops—it only tells you what happens when you issue certain commands. There is nothing to stop you from, say, ordering a brigade whose current energy level is 2 to move at maximum speed off-road.

As you can see from the first table, doing so will cost you 6 energy points! You'll end up with your troops in a negative energy state—which means they're beyond exhaustion. Disaster will occur! If you ever do anything that would leave you below 0 in energy, your brigades will start self-destructing: traffic accidents will flare up, friendly fire massacres will break out, and people will, in general, be very testy. As mentioned in the "Fatigue" section, if a brigade's energy state is at or below zero, you won't be able to issue it any commands, so this danger occurs when it is very close to, but above, zero.

-Roads-

The "roads" in Falcon are the links between the sites. If you assign a brigade to move forward, it will try to do so by moving along these roads. To stay on the road, you must figure a site-to-site path to your eventual destination, and put the brigade's destination marker directly on the either the next friendly site in that path or somewhere on the gray line leading to it.

If StratFalc decides that you're ordering a brigade to leave the road, it will ask you to confirm this. If you keep getting a confirmation dialog box but you're placing a destination marker on the gray line, first check that the site you're aiming for is indeed a

neighbor of the site you're leaving. Bear in mind that some roads are "one-way." You can see these roads in the "Lines" submode—if you highlight the site which holds your brigade, the bright yellow lines show all the possible "on-road" destinations.

An important note: Once you leave the road, the ONLY way to get back on it is to move the brigade to a site (any site).

-The Front Line-

Every six hours your brigades stop and do a complete reconnaissance. They look in all directions. If one is surrounded on three sides by the enemy, it will move forward, but will do so very slowly. It may also begin to take casualties because it is making an opposed move. (These casualties are not as drastic as they would be if it runs

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into an enemy brigade, however!)

Very often you must advance into enemy territory to conquer sites. Try to minimize the number of turns you spend back there. Beside being sniped at by the enemy, your brigade will also regain strength at the rate of only 1 point per turn.

-Water-

Water was problematic in writing the movement code. I decided either I'd have to constantly compare the brigades' locations to those of the Falcon shorelines, and so add in specific (and extremely slow) code for each theater, or simplify matters and speed things up. I chose to simplify matters, so here's how it works:

When a brigade does its reconnaissance, it looks north, east, south, and west of its present location. If it doesn't see any sites at all in a particular direction, it won't go that way, period. This method has its drawbacks. In Bosnia, for instance, the airbase at Brindisi, Italy, in the southwest corner of the theater, is across the Adriatic from Bosnia. However, because of these movement rules, if you have a brigade on the coast of Bosnia and order it to go west, into the sea, it will see no problem with that and will happily oblige—like a bunch of lemmings! It does this because it sees those bases to the west and says "okay." Maybe they found some transports somewhere.

On the other hand, these same movement rules allow you to move your brigades onto the rocky beaches of the Kurile Islands.

The point is, it's up to you to order your brigades to move sensibly.

-Falcon CAS Missions-

Units which are placed by Falcon 3.0 in support of the current mission come out of your Division. They will be taken from the nearest brigade unless that brigade doesn't have enough units. If StratFalc has raided all three of your brigades and still doesn't have enough units to satisfy Falcon's placement (a very rare occurrence!) it will take units from your sites to make up the difference.

The fifteen mile rule is overridden in this case; it's assumed one or two of your companies got lost somehow and ended up in the mission's target area (fog of war and all that).

This puts a whole new slant on Falcon itself. Successfully completing a CAS mission is now *extremely* important. If you fail, your brigades will lose most—and maybe all—of the allied units that are involved in the mission.

For this reason, you should feel free to tweak those missions where Falcon places two opposing columns too close to each other and by so doing makes the mission impossible to accomplish (see "2-columnn CAS missions" under "Impossible Missions" in your StratFalc manual).

Loadouts

Another major new feature in StratFalc version 1.1 is the addition of "Loadouts" to the Aircraft Arming Dialog. With these controls, you can automatically save and load the appropriate weapons to any aircraft.

Each aircraft type has its own (individual) set of 18 loadouts. Default loadouts for each plane are provided, but these are only roughed in and can be adjusted or renamed to suit your needs.

Using Loadouts

The first thing you'll probably notice in the Arming Dialog box (you get to this box by pressing the "Arms" button in any Tactical/Air submode) is the red section at the bottom of the box. This contains a very brief description of the aircraft's normal loads and available hard points. If you wish to change the notes in this box, use a text editor to alter the appropriate "*.NFO" file (e.g., the one for A-10s is A-10.NFO). Here are the rules: the file size cannot be greater than 350 bytes when you're finished and StratFalc will ignore carriage return/linefeeds. (Thanks to Miles Constable for supplying the appropriate notes!)

To use a loadout, simply click on the "Use..." button in the Arming Dialog box. A new dialog box will pop up. You'll see 18 radio buttons, each labeled with either some cryptic designation or the word "Unused." An explanation of the labels is given below.

To examine the contents of a loadout, just click on the appropriate radio button. The bottom of the dialog will fill with a description of that particular loadout. To load the weapons you're viewing, click the "use" button. The dialog will close and the Arming Dialog will now contain the desired weapons. Adjust the weapon quantities if desired, then click on "OK" to finalize loading the aircraft.

One thing should be mentioned. To use these loadouts effectively (indeed, to load any aircraft effectively with StratFalc), you should be comfortable with the alphanumeric designation of the various ordnance. For instance, you should know off the top of your head that an AGM-88A is a HARM (High-speed Anti-Radiation Missile). If you don't, please do some studying of the reference section of the Falcon manual; it will be time well spent.

The default labels follow these conventions (up to a point):

The first 3 or 4 letters tell you the suitable mission types for the weaponry.

ATA	Air to Air
CAS	Combat Air Strike
BOMB	Stationary Target Strike
SEAD	Suppression of Enemy Air Defense

After the hyphen come any amplification of weapon types.

For example, for ATA loadouts:

BVR	Exclusively beyond visual range missiles (AMRAAMS)
WVR	Exclusively within visual range missiles (Sidewinders)

For CAS or Bomb:

PGM	Precision Guided Munitions
UG	Unguided Munitions

(If there is no designator the loadout is a mix.)

An extra letter after the slash signifies the size of the individual munitions. "/H" is Heavy; "/L" is Light; "/M" is Medium. Again, no slash letter indicates a mix.

Finally, the last section designates the aircraft's relative range and hence, is a rough indicator of how much fire-power it's carrying.

LR	Long Range—some weapons will be replaced by fuel tanks
SR	Short Range—no fuel tanks and extra weapons

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(If there is no designator, there is no extra fuel. Neither are there any extra weapons.)

As an example, a loadout of ATA-BVR-SR on an F-15 would signify a jet that is loaded down with 8 AMRAAMs. ATA-BVR-LR might mean 6 AMRAAMs and external fuel.

On a B-52, a loadout of BOMB-UG/H would mean 24 Mk-84 (2000 lb.) iron bombs.

Saving Loadouts

To save a loadout, first you must have the appropriate aircraft type as the active one. Then click on the "Arms" button. Then you simply fill in the Arming Dialog with the weapon loadout you want to save and click the "Save..." button. A new dialog will appear and will ask you the slot in which you want to save this loadout. (The first slot labeled "Unused," if there is one, will be preselected for you. Otherwise the first slot will be preselected.) Select the slot you prefer and click "OK."

If the slot you choose is already named, you will get one more chance to abort the process; otherwise you'll be prompted for the name of the new loadout.

Editing Loadouts

To change a loadout, first you need to fill the Arming Dialog box with the weapons you wish to place in the loadout. The fastest way to do this is to bring up the dialog box, press "Use...", and then select the loadout that you want to alter. Click "OK" to fill the boxes in the Arming Dialog. Alter the loadout however you want, and then click "Save...". Select the same loadout name as the one you were altering, and click "OK."

More information on Loadouts

The reason for the addition of the Loadout features is the difficulty in arming aircraft and the ease with which they can be overloaded. Each default loadout has been tested to make sure the aircraft will fly properly. This saves you the aggravation of precision-planning a mission only to see your pilots do a series of low speed stalls into a hillside (and why don't they just dump their stores, anyway?).

Also, feel free to share your loadout files with others. You'll notice that I've supplied only 3 or 4 loadouts for most aircraft. That's because building these is a very time-consuming operation. Each loadout data file has the extension LOD (for example, the F-14 loadout is "F-14.LOD"). If you build up some nice sets, put them up on CIS or any other board. ONLY THE LOADOUT FILES, of course, none of the money stuff (not the EXEs)!

There is more to creating a successful loadout than arming the aircraft and keeping the weight below that in the "Max" box. Drag affects loadouts too. You might be able to place 20,000 lbs of Mk-84 bombs on a plane, but 20,000 lbs of Sidewinders would cause trouble. For this reason, it's a good idea to test any new loadouts that may be large enough to cause problems.

A special note about BUFFs

Heavier aircraft in general and B-52s in particular are very easy to crash. A good rule of thumb is to never assign a wingman in the first F-16 flight to a B-52, because no matter what you do, they start too close to the ground. If you must put one in your own flight, make him "extra light" and get off the ground as soon as you can. That first racetrack turn while he's waiting for you to get airborne is a killer!

Also, be *very* careful with waypoint altitudes. A B-52 is not going to climb too steeply, but it'll try like hell to get where you tell it to go. If you place waypoint 2 at 9000 feet and only two miles from waypoint 1 at 2000 feet, your

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B-52s will actually end up at waypoint 1.5 at 0 feet (and in a twisted mass of metal).

Speed Limits

Speed limits will now be enforced! If you change an aircraft type in a flight, and the speed of any of that flight's waypoints are greater than the maximum speed of that aircraft, then the offending waypoint(s) speed will be lowered to the max speed of the aircraft. In other words, the flight won't be able to go faster than the slowest flier. If you don't like this, you can disable the feature with the "/NOSPEEDCHECK" switch.

This can cause a problem if you add a slow aircraft and subsequently remove it: the waypoints will all be "too slow." To alleviate this problem a bit, I've made it easier to enter the value "450" (which seems to be the most common waypoint speed) in the speed box. If you click on the speed box, then hit the <n> key ("n" for "normal"), then hit <Enter>, "450" will automatically take the place of that "n" in the speed box.

The smart thing to do to avoid frustration is assign all aircraft to a flight *first*, before you start tweaking waypoints.

Also, because of some limitations with storage in the data files, the fastest speed for any aircraft in Falcon3 is 1275 knots.

Please note that the maximum speeds are taken from various sources (Falcon manuals, Jane's, etc.) and that the actual top speeds of aircraft may be less in the simulation, depending on weapon loads, altitude, etc. For this reason, the "Timing Trace" feature may mislead you: you can still *set* a speed higher than the aircraft may actually fly, although you can't set it higher than the aircraft's *absolute* limit.

Fuel Replacement

As you may have noticed by now, Falcon 3.0 robs your fuel. If you exit from the cockpit in Falcon by using the "ALT-X" method or by pulling down the menu and hitting "Quit to DOS," the fuel currently loaded in your F-16s does not return to your inventory. To make Falcon put it back in the storage tanks, you have to use "Abort Mission" and then exit to DOS from the mission planning screens.

However, with StratFalc 1.1, this problem is just about solved. First, though, YOU MUST HAVE SIM MODE ACTIVE for this feature to work (otherwise StratFalc has no way of tracking your fuel mission to mission). If StratFalc sees your fuel inventory drop suspiciously, it'll boost it back up to its previous level. It knows real use, though, so you still have to manage your fuel—this isn't a panacea!

One Key To Flight

If you hit the <F4> key, StratFalc will exit and start Falcon, and when you exit, you'll be back in StratFalc again (this even works while in the KCC menu program!). This feature works through batch file processing, so it uses none of the system's memory. Okay, virtually none.

Choose Your Flight With Ease

You can now instantly switch your first Falcon flight with any other flight. Just hit <F3>.

This feature will let you swap F-16 flight 1 automatically with any other F-16 flight. If, for example, you draw a CAS missions and you want fly CAP instead of hitting the column, you don't have to painstakingly swap all Flight

2's waypoints for flight 1's—you just swap the flights.

More Reliable Aircraft

There's a new limiter on StratFalc flights to better reflect what Falcon actually places in the theater—total aircraft is now 14, not 16 as stated in the manual. It turns out that Falcon almost always keeps two aircraft in reserve in campaigns (those randoms gotta come from somewhere!).

(Almost) Unnecessary Reading

The snippets below elaborate on some of the finer points of using StratFalc. They consist of questions and observations that came up in using and testing StratFalc 1.1 in general and Sim Mode in particular.

Sim Mode

- Q.** The documentation states that number of forces is calculated depending on the configuration campaign setting, i.e. "easy etc.". What happens if you change that setting in the middle of a campaign?
- A.** Nothing. Your forces are set at the beginning and that's what they'll stay. However, changing the difficulty in midstream *will* change the formula used to determine wins/losses. For example, if you go to easier, less of your guys will get blown away.
- Q.** While it may be more realistic to start the allied flights from their respective bases, it's also a major pain. Realism is great, but we don't have any control to launch the allied flights early to rendezvous. For example: CAS mission in Pakistan. I got to move the mud, but my escort was 75 nmi away, while my target was 17 nmi from my own base. Lost 3 Vipers on that one.
- A.** Well, that's where the management aspect comes in! Your *default* escort is 75 miles away—but you're the commander now and you can override this obvious error of an underling!

I think the thing to do is examine what squadrons are stationed nearby (or at your base), and then change the aircraft type of the escort flight to an appropriate, nearby aircraft type. StratFalc will offer to move the first waypoint to the proper base for you.

Meanwhile, see if it's worthwhile to transfer that distant squadron somewhere closer. StratFalc initially places all aircraft at bases depending on (1) the type of aircraft and (2) the bases' distance from the front (for example, E-3s always start out pretty far from the action). What I've been doing personally is, at the outset of a campaign, juggling my squadrons. Most of the time I just ignore Falcon's "suggestion" of a support flight and change it to something I think is more appropriate for logistic or strategic reasons.

Another option is to delay your F-16s (fly around and wait for a while?), until the help gets there. But, of course, then the enemy randoms will show up like FOD on a hangar deck!

- Q.** F3 doesn't recognize StratFalc site captures in its Theater Updates even though the icons show up blue in F3. Is there any way that the changes could be written into the code to modify the file to reflect the actual changes?
- A.** In a word, no. Falcon has it's own routine going on and I don't want to mess with it. (It took a while to decide to change site-capture at all!) The "capture" announcement that StratFalc gives you was the best I could come up with.

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Q. Am I correct in assuming that F3 *does* recognize the sites you've captured with SF, but doesn't add them to the allied gains list?

A. Oh sure, Falcon recognizes them. When you fly over the sites, there are friendly units down there (with the exception of "transcendentals" discussed in a later question), and when F3 does its victory checks, they count as yours (which is really all that counts!). They just don't get added to the 0600 "captured" list because Falcon didn't capture them using its own routine. Falcon thinks the sites were either captured earlier in the campaign or they were always yours.

In a related vein, one of my fears is that StratFalc's sim mode makes it just too easy to win a campaign. Making the brigades work in the manner they're intended is a fine balance, and I honestly don't know if I've got it right. I know one thing: if one gets ambushed behind enemy lines, it's hell to extract it!

Q. Is it true that you can issue an attack order for a site that you already call your own?

A. Yep, you can issue the order. Won't do you any good, of course, but there's nothing to stop you! It could be changed, I suppose, but why bother? (For some perverse reason, I like it!)

Q. What happens to the StratFalc planes that were shot down during the mission? Are they lost, or not?

A. The short answer is: they might be!

The long answer is:

StratFalc has no way to see *directly* what happened during the mission to any planes other than F-16s (and even then, it doesn't know if F-16s were shot down or another type that was in an F-16 slot). What it does is see how well (or poorly) the mission went and the extrapolate that for any StratFalc planes (or ground units) that were placed "At Risk" before the mission began.

Say you have 4 F-16s flying, with 2 F-15s in StratFalc (Allied) slots for support. In this case, the F-15s are placed "At Risk."

You fly the mission and lose two F-16s and the two F-15s *in Falcon*, but still succeed in accomplishing the mission.

Then you return to StratFalc, which sees (1) that you succeeded in your mission but (2) that you lost 2 F-16s in the process (again, it doesn't see that the F-15s were lost). It checks the difficulty, looks to see how many enemy planes you shot down, looks to see how many ground targets you destroyed, etc., and comes up with a percentage—a probability—that all units that were placed "at risk" survived the mission. Then it "rolls" against the units at risk using that percentage. If the unit is destroyed, it tells you so.

So you can see, then, what you lose in Falcon for the StratFalc planes doesn't matter. Therefore...

Q. Does Stratfalc incur extra losses over what was lost in the mission if the mission is not successful?

A. No, not extra. You lose F-16s in Falcon. You lose the StratFalc (or Allied) planes in StratFalc. And...

Q. Is StratFalc rewriting the mission history based solely on my success or failure?

A. Yes, but again, only regarding the StratFalc (Allied) planes. Whatever happened to the aircraft in your F-16 slots in the mission remains as it happened.

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Just to make this explicit: only the StratFalc (Allied) flights are placed "At Risk." F-16 slots are left alone, no matter what aircraft type you put in them. This is to prevent "double jeopardy." If F-16 slot aircraft were put in the "At Risk" pool, as well as the StratFalc planes, then you'd face losing them both as available F-16s in Falcon and in StratFalc.

Also, this offers an additional indirect method of resupplying StratFalc aircraft. As one user put it:

In a real campaign, would F16s be the only A/C that are replaced and resupplied? Hell no! Granted, even in real life the quantities of allied A/C are finite, but I'm sure that there would be some replacements in the pipeline. So in a roundabout way, by not taking my A10s away from me even though I lost them (when they were in wingmen slots) you are resupplying me. Geez, that's thin, isn't it?

I use A10s for this example because I can't recall when I've ever had them for an escort <g>, or when I ever had to escort them somewhere. So, basically, according to your docs, they will never get resupplied by StratFalc like, say, a pair of Eagles would (to use your example). Call it a gift from Uncle Bill or something. The allied squadrons appear to get resupplied and you shouldn't have to do alot (if any) programming to get there.

Well, Mark, I like the reasoning. The code has been altered to do exactly this. In any case, other than being the only real option, it's nice to have some additional "justification" for it!

Loadouts

Q. The canned loadouts are a great feature, but when started up cold many of the planes have really crazy loads, like 37 wing tanks and 22 bombs on a MiG 19. If one never bothers to check the loadouts, like on an enemy plane, it could be disaster. I wonder if this is causing a lot of crashing of planes that goes unnoticed.

A. Whatever StratFalc shows you for weapons, when you first look at a mission after coming out of Falcon, is indeed what is on the plane (however crazy that may be). I have seen the 22 bombs before, but I've never seen the 37 wing tanks!

Q. All planes seem to have the same gun ammo loadout. I note this does not count against the weight.

A. Yeah—in Falcon, ammo has no weight!

Q. Are there upper limits to this number?

A. I believe it's 999 rounds—at least for F-16s.

Q. What about limits on flares and chaff?

A. For F-16s, 30 and 30, respectively, no matter what number you put in the box.

Q. When F-16 slots are filled with a different plane, is the fuel load and use calculated as if it were an F-16, or is this different for different planes?

A. For the purpose of filling the fuel box, StratFalc assumes every aircraft is an F-16, so the calculations only apply to F-16s. It does seem to hold pretty close for similar aircraft. Otherwise, I have no idea how valid it is.

Q. As an aside, can FalcCalc also deal with this?

A. FalcCalc thinks anything in an F-16 slot is an F-16. So it deals with it by ignoring it!

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- Q. About loadouts: I assume you got the max weight from Falcon or other sources, and I also assume that this max weight is not really related to the flyable load. Or is it? If this is also complicated by drag, I think the documentation should indicate that home brew loadouts need to be tested for flyability.
- A. Max weight is definitely related to the flyable load—and closely, too. It's just that, in this case, a pound of feathers weighs more than a pound of lead. You can have X pounds of iron bombs and fly fine, but X pounds of Sidewinders may be unflyable. Good point—all loadouts should be tested. This will be in the docs!
- Q. I'm using B-52s. The Max Weight given is 488,000. After loading the MK84s the weight is 485,863. But it lights up in red and beeps like it's saying it's too heavy.
- A. The box turns red if you go over 98% of max weight. It is confusing (especially since it's undocumented!) and has been changed to 100% for the release version. If you go over 95%, it'll now turn yellow!

Kill Boxes

- Q. About Kill Boxes—does a second F-16 flight in a different box need to have the point of view focused on it to wake up the ambient ground forces?
- A. Yes. The big point is this: only one kill box is active at a time—and that's the one where *you* are. If the second F-16 flight is out of your kill box, the ground forces there are inactive. When you jump to that wingman view, though, they wake up—often right underneath the flight. (This surprises the hell out of those pilots!) That's why you have to watch the other flight "all the way in" from about 7 miles out: they'll have time to properly set up attacks that way.
- Q. If Falcon 3.0 creates enemy ground forces, are they active independent of point of view?
- A. Yes, they're active all the time. Kill boxes only apply to the units at a *site*.
- Q. I've conquered a site but when I fly near it, I still get locked up by enemy SAMs, with a TWI code of 5. The site shows up as blue in both StratFalc and Falcon. What gives? Do I own the site or not?
- A. Congratulations! You've run into a "transcendental." You own the site, all right, but there are some weird visitors sharing it with your units. "Transcendental" units are the fixed SAM emplacements. On the Allied side, they're Patriot missile batteries. On the Enemy side, they're the SA-2 missile sites.

I call them "transcendentals" because they're active ground units, associated with a site, that transcend Falcon's normal Kill Box activation scheme. They're always active and they're not limited to one kill box (they're also the only ground units active in Red Flag). They don't exist in the original three theaters (Kuwait, Israel and Panama), only in Pakistan, Japan, Korea and Bosnia. Technically, they're *active* map objects, not site objects. (The ships in Japan are also transcendentals.)

They live by some very strange rules. Enemy ground units don't "see" them, so when a transcendental is at a site, and that site is captured by the other side, the transcendental may peacefully coexist with the site's new tenants. It will still lock up and fire on aircraft. It's like they exist in a separate dimension than the other ground units, which is another reason to call them transcendental. (Actually, the ground units are treating them just as if they were any other structure at the site.)

However, while ground units can't "see" them, your aircraft surely can, and a SEAD flight will knock them out once and for all, for the remainder of the campaign.

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How do you deal with them? Well, since the ground units won't do the dirty work of destroying them, you'll have to. If, after your side captures a site, you're still getting locked up (and launched at) from that site (as your question indicates you are), then you've got to take action to knock out the transcendentals yourself. The sites are, namely, the fixed "missile sites." Their icon in Falcon shows a missile.

There is one nice part to all this: When performing a strike on transcendentals, you don't have to wake up the site, so AGM-88s are perfect for this type of attack—they're long range/standoff, and in this instance there's no artificial restriction on their use caused by Kill Box boundaries. Not only that, but you don't have to go with the strike force or view it—you can even task a StratFalc/Allied flight to do the job while you're using your F-16 flights to perform the current mission. You then have no risk of losing your own aircraft (cowardly as that sounds!).

Since these units exist no matter who occupies the site, you can attack them at any time. SA-2 sites are easily spotted, but if the enemy still owns the site, a SEAD flight may spend its ordnance on other SAMs without destroying the transcendentals. For this reason, you may want to avoid attacking these units until you capture the site, when your strike force will have no problem picking them out (they'll be the only enemy units to hit!).

If you're set on destroying them before you capture the site, though, there is a way. Since they transcend Kill Box rules, just approach the site from the closest kill box border, but don't cross the border. The transcendentals will light up (SA-2s will track you from 45 miles away or more!) while the other units at the site will remain asleep. Let loose a HARM or two at the offending SAMs.

And a final note about transcendentals. As map objects, they're immune to the "Zoom" level you set in Falcon's "Options" menu. They will always be 1X size, which may make attacking them even harder.

Troubleshooting

- Q. Sometimes when I'm changing something with the mouse, I have to keep clicking it to make it change.
- A. You have to wait for SF to finish redrawing the screen before you hit another control. The code doesn't get back to polling the mouse until the screen is in place, because otherwise it wouldn't know which controls were "in focus."
- Q. I want to be sure that I understand Primary Warning Number 5 ("THOU SHALT FORCE FALCON 3.0 TO CREATE A NEW *.MIS FILE FOR EACH NEW MISSION.") completely. My understanding after reading the manual would be that you would enter Falcon 3, look at the mission and determine what changes to make, then start StratFalc, make the changes, and save them. Here is where I want to be sure that I have it correct, now when I start Falcon 3 after I have made the StratFalc changes, DO I EXIT THE PROGRAM AFTER HITTING THE "TAKEOFF" BUTTON AT THIS TIME, AND THEN RESTART THE GAME AND THE MISSION? In other words enter the program, leave and then enter the program again?
- A. OK, warning 5 means that you have to get into the cockpit (or more correctly, press the "Takeoff" button) at least once for each mission before entering StratFalc. This is because StratFalc needs access to the "squad?.mis" file which is only created when you press the "Takeoff" button. A typical session would go like this:
- 1.) Start Falcon, and either start or continue a campaign. Go through all the screens—look at the mission description, but don't bother memorizing it. It's always available in StratFalc if you hit <F2>.
 - 2.) Continue through the Falcon screens and press the "Takeoff" button. Once you're in the cockpit, exit to DOS.

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- 3.) Start Strategic Falcon. Open the campaign you were using in Falcon. Adjust all flights, F-16 and otherwise, and everything else the way you want it.
- 4.) Start Falcon again and go through into the cockpit. You don't need to pause in any mission screens—you've done all this in StratFalc. All you have to do is choose the pilots for the aircraft in your F-16 slots. Fly the mission.
- 5.) At the end of the mission, go through the debrief. Press "Next Mission," and hurry through to the cockpit again. Return to step #2 above.

So you can see, you only exit Falcon *once* between missions. When you're done fighting for the night, just make sure you leave Falcon from the cockpit (and so create a new squad*.mis), and for your next session, start by modifying that mission with StratFalc.

Q. I just purchased Strategic Falcon recently, and I'm very frustrated in trying to get the Strat flights to do what they've been tasked to do. Maybe if I give you an example of a mission, you can tell me what I'm doing wrong.

Falcon has given me one flight of two F16s to sweep enemy territory. From Strategic Falcon I can see that I also have one flight of F14s that are flying along almost the same flight path. The flight path takes both flights over an enemy base which has tons of SAMs, so I add two more flights from Strategic Falcon. I make the first additional flight an F16 flight, but I replace them with F4s loaded with HARMs and Mavericks, set their waypoint over the enemy base, set their altitude at 9000, and set their action to SEAD.

I make the other additional flight an Allied flight of F111s with HARMs, Mavericks and MK82s, set their waypoint over the enemy base, set their altitude at 3000, and set their action to S&D. I fiddle with the speeds of all the flights so that the F4s and the F111s reach the enemy base about a minute before my flight does, and from slightly different angles. I save the file in Strategic Falcon, load the STRTSPRT.COM program, go into Falcon, and start the mission.

Since we're all basically in the same area, I can jump back and forth between the flights using the Wingman View key. About 20 miles before the enemy base, I turn on the autopilot, and jump to the F4s and the F111s just to make sure they're set up. I use the F3/F4 keys to see the enemy base coming up, and sure enough they start firing SAMs at these flights. But instead of doing anything about it, I watch as first the F4s and then the F111s dump all their air/ground stores and try to outrun/outmaneuver the incoming SAMs. The F4s and F111s all get clobbered by the SAMs, which then proceed to destroy my flight also.

I've tried this mission (and others like it) several times, changing the pilot Skill Level, the pilot Temperament, using SEAD or CAS or S&D as waypoint actions, putting the attack waypoint nearer or further away from the enemy base.....and the additional flights always dump their stores and try to act like they weren't supposed to be on an air/ground mission. I've read thru the manual, but that didn't help; what am I doing wrong?

A. Okay, it looks like you've done everything right, but this:

"Since we're all basically in the same area, I can jump back and forth between the flights using the Wingman View key. About 20 miles before the enemy base, I turn on the autopilot, and jump to the F4s and the F111s just to make sure they're set up."

Here's where I suspect the problem lies. First off, it's possible (and probable) that your F-16s are not in the kill box *with* the ground attack flights while you're jumping back and forth.

Once you jump to the wingman view to watch the SF planes, *leave the view there until the sf flights complete*

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their attack!

Every time you jump back to your F-16, you're probably leaving the kill box and so "turning off" the enemy SAMs—so the ground attack flight have nothing to line up on. Then, when you jump *back* to their view, you reenter the kill box and *suddenly* "switch on" the SAMs there, which find your SF flights (who have not set up any attacks on them, because they're "off" when you're not there!) and toast your planes.

First, make sure you start the mission with the ground attack (StratFalc flights) *at least* 7-10 miles from their target, and when they get to about that point, set your autopilot and jump to the wingman view of the StratFalc flight that is closest.

Also, if the site is close to the edge of a kill box, make sure you're not coming in over that edge. If the aircraft are too close to the SAMs when they wake up, the planes won't have time to set up attacks.

These are the keys:

- Give your SF aircraft plenty of room to set up.
- Make sure they don't come at a site that's close to the edge of a kill box from over that near edge (try to get at least 7 miles).
- Once the ground strike craft get close to the site (within about 7-10 miles), watch the attack all the way in.
- If you can't watch the site all the way in with the wingman view (as you know, sometimes StratFalc flights go "out of range"), use the Transporter Room method described on Page 21 of the manual to activate the site and keep it activated until your attack can hit it.

When all else fails, the Transporter room usually comes through.

Q. The game will hang up short after I pushed the Take Off-Button.

A. Do the following:

- The first thing to do is get into your \FALCON3 directory.
- Then type "CLEAR" and hit <Enter>.
- Then start Falcon3, go into the campaign, and get into the cockpit.
- If Falcon3 hangs again, then this campaign is damaged and you'll have to start a new one. (Sorry! You can try running RESTRCAM.BAT; it might help.)
- If Falcon lets you into the cockpit, quit to DOS from the cockpit.
- Start StratFalc (by typing "STRAT", *not* "SF"), alter the mission and save it. Go into Falcon. The mission should fly normally with your changes.

The number one cause of this kind of problem is not having the STRTSPRT TSR loaded when playing Falcon3. The number two cause is abandoning a campaign before its conclusion. If you ever abandon a campaign, run "CLEAR" before starting a new one.

And finally, here's a tip from your Uncle Bill.

Attacking Enemy Sites: How to Live to Tell About It.

A successful strike against a well-defended site is more than just placing a waypoint and sending in some heavily loaded F-111s. Doing this will destroy some enemy units, but it will also, inevitably, lose the bombers. That is not a successful strike!

The first thing you have to do to pull off this type of attack is "honor the threat." For our purposes, we'll assume that the site we're going to destroy is a full-capacity, full-strength site. In Falcon 3.0, that means 60 units—more than half of which are anti-air of some form. Even though no more than about 35 will appear at one time, this is more than 4 F-111s can handle; it is probably more than any amount of aircraft you have to spare can handle in one attack.

So here's the first rule:

- Don't attempt to destroy all units at a full-strength site with a single attack.

"Well, great," you say, "then how do I tell my fully-armed bombers to break off? There's no way to tell them to hit only a few units each and then go home."

Yes there is. To make the aircraft only commit to a limited attack, you have to do two things: make their attack waypoint easy to achieve and limit the load of the lead plane.

It helps if you try to "think" like a computer pilot (who is really just a robot following your orders). He is going to do what you tell him to do, or he's going to die trying. When you set a waypoint, you are telling his little silicon brain to fly to that waypoint—this much is obvious. However, if that waypoint is in the center of the site in question, he has to fly over quite a few nasty items to get to it.

This isn't exactly what you have in mind—flying *over* the nasty items—what you want him to do is *destroy* those items. But he's flying fast; he can only destroy so many bad guys before he starts flying over the rest of them.

And as he flies over the ones he cannot destroy, they start locking him up with radar and then start shooting at him. Avoiding an incoming missile has priority in his little brain (we said he was a robot—we didn't say he was stupid!), so he dodges the missile and in so doing he turns away from the waypoint. After he's defeated that threat, he goes for the waypoint again—only to be locked up once more and shot at. Sooner or later, if he keeps dancing around up there, he's going to get dead. And by this time, he's too busy dodging missiles to pull off any meaningful attacks. He should have called it quits by now.

That's why you should make the waypoint easy to achieve. Once he has flown to the point in space where you told him to fly, he's free to go to the next waypoint. Exit, stage left.

In Falcon, ground units are generally distributed to the northwest of the site to which they're assigned. A site with sixty units will have those units scattered throughout an area of about seven square miles, with the site itself (normally) in the southeast corner, about a mile inside the perimeter. The attack waypoint should be placed *just outside* the perimeter—not in the center of it!—on the same side as the direction from which the aircraft are attacking.

For example, if your aircraft are coming in from the northwest, the attack waypoint should be placed about 8.5 miles northwest (6 miles north, 6 miles west) of the site; if they're coming in from the southeast, the waypoint would be about 1.5 miles southeast of the site.

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As the planes come in, they'll start shooting. Once they reach their waypoint, don't worry, they'll keep shooting—but now they're free to leave once they've used up their weapons or if things get too tough.

The second thing you have to do to keep an attack under control is limit the quantity of weapons on the lead plane. This is really to safeguard the wingmen—they don't fly to waypoints; they fly to a specific point in space that's relative to the leader. (If the leader is destroyed, the first wingman takes his place.) If the leader is still circling over the site trying to shoot targets after his wingmen have gone winchester, then the wingmen are taking a large and nonproductive risk (it's one thing to risk getting shot down while you're actively destroying the enemy—it's quite another to risk getting shot down just because your programming tells you to stay on the wing of your leader!). It behooves you to try to make the lead plane run out of ordnance first.

Don't worry that the wingmen will bug out immediately once the leader goes—they'll stay and take good shots while they can, but just as you want the leader to be free to leave, you want the wingmen to be free to leave.

Using these pointers, you can increase the survivability of your planes and hence increase your chances of winning the campaign.

I'd like to express my sincere thanks to everyone who took time to write. Unless fatal bugs rear their tiny hideous heads, this will do it for StratFalc. StratMiG is next!

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